



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

February 20, 2014

SUBJECT: Various Routes
Project ACCM-000S(860)
Section 2009-0871
Various Counties
Contract No. 60I34
Item No. 138, February 28, 2014 Letting
Addendum A

NOTICE TO PROSPECTIVE BIDDERS:

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

1. Revised pages 10-12 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,

John D. Baranzelli, P.E.
Acting Engineer of Design and Environment

A handwritten signature in black ink, appearing to read "Ted B. Walschleger" followed by a small "P.E." to the right.

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

cc: John Fortmann, Region 1, District 1; Tim Kell; Estimates

MS/kp

Ethernet Switch

Manufacturer: Cisco Model 2960 or approved equal.

Environmental	Temperature:	0 to 40 °C (32 to 113 °F)
	Humidity	10% to 85% (non-condensing)
Backplane	10,100 Mbps full duplex	
Port Density	8	
Physical Characteristics	Weight (maximum)	3 pounds
	Dimensions (nominal)	1.73" x 8.1" x 10.6"; the equipment shall mount in a standard EIA 19-inch rack
Power	120VAC±10%; redundant power supplies (The power supplies shall be removable while the equipment is operating with no degradation.)	
Optical Interface	GBIC; single mode long haul and multimode short haul	
Link Power Budget	17 dB at 1310 nm; 8.3 μm fiber core	
Network Interface	Physical Connector	RJ-45
	Network Rates	10/100 MHz Ethernet
Regulatory Compliance	Safety UL Listed	UL 60950
	EMC	47 CFR (FCC) Part 15, Type A certification
	Environmental	GR-63-Core Network Equipment Building Standards
	Telecom	47 CFR (FCC) Part 68 compliance
Supported protocols	Ethernet	IEEE 802.3; 10BaseT
	Fast Ethernet	IEEE 802.3u; 100BaseTX
	Virtual LAN trunking/tagging	IEEE 802.1Q; IEEE 802.3ad
	Spanning Tree Protocol	IEEE 802.1D; IEEE 902.1w; and IEEE 802.1s
	Security	IEEE 802.1x

Optical Switch and Multiplexer

Manufacturer: For compatibility with existing installed equipment, the proposed equipment shall be Cisco.

IDOT has a microwave repeater at ISP District Chicago. This repeater is only in-out and has no capability to connect the ISP facility to IDOT's network. The proposed switch shall connect in between the repeater radios to pull off a 100 Mbps fiber line into the ISP Building. The existing repeater line shall be fully operational throughout construction. The contractor shall coordinate and determine work required. It is anticipated the following equipment will be required.

Revised 2/20/14

ISP District Chicago, Desplaines, IL

Item Description	Quantity
15454 SA HD NEBS3 ANSI w/ RCA and Ship Kit	1
Shelf Controlled Cooling Fan Tray, ANSI, HPCFM, I-Temp	1
Alarm Interface Card Enh Intl, I-Temp	1
Empty slot Filler Panel	8
Timing, Communications, Control Three, I-temp, 15454 chassis	2
15454 ANSI MSPP Rel. 9.2.1 SW, Pre-loaded on TCC	2
15454 ANSI MSTP-MSPP Rel. 9.2.1 Feature Pkg., DVD, RTU Lic	1
Cross-Connect Module, High Cap. Tributary	2
OC3/12/48, 2.5G Max, 4 ports, IOF	2
Carrier Ethernet card - 10 port Multirate 10/100/1000 Mbps	2
SFP - 1000BASE-SX Gigabit Ethernet, 850nm, MM, I-TEMP	4
SFP - OC3/STM1 IR1/S-1.1 1310 SFP, ITEMP	4

Building E

Item Description	Quantity
Carrier Ethernet card - 10 port Multirate 10/100/1000 Mbps	1
SFP - 1000BASE-SX Gigabit Ethernet, 850nm, MM, I-TEMP	2

District 1 H.Q.

Item Description	Quantity
GBIC- 1000Base-SX, SC, MM	2

The above lists are not to be considered to be all inclusive. The contractor must coordinate the work with the Optical Consulting Systems Engineer, Mark Nelson, Cisco Systems 815-341-7673

RG-6 Coaxial Cable

Section includes: RG-6 Coaxial Cable and Cable Connectors.

Manufacturer: The coax cable shall be a Belden 1695A precision video cable, or approved equal complying with the following specifications. The center conductor shall be an 18 AWG, Solid Bare Copper conductor, the insulation shall be plenum rated foam FEP insulation, and the shield shall consist of an Aluminum Foil-Polyester outer shield with 100% shield coverage plus tinned copper Braid Shield with 95% shield coverage. Coaxial connectors shall be BNC or as required by the equipment to which the cables connect. The connectors shall attach to the cable by crimping or by a cord-grip clamping action. Connectors shall be plated for corrosion resistance and good electrical connections. All BNC connectors shall be physically designed to fit the specified cable without adaptation and shall have a characteristic impedance of 75 ohms. Connectors with a characteristic impedance of 50 ohms are not acceptable and shall be replaced by the Contractor at no additional cost to the State.

The connectors shall be Amphenol part number 31-70000 or approved equal.

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Cat-6 Ethernet Cable

Section includes: Cat-6 Ethernet Cable Connectors.

Manufacturer: The cable shall be Belden part number 1874A or approved equal. The terminations shall be crimp-on RJ-45, Ideal Industries 85-396 or approved equal.

Execution.

Installation Qualifications:

1. Installer shall be certified by the manufacturer as qualified to install, operate and maintain product(s) specified.
2. Install the system in accordance with the equipment manufacturers recommended procedures.

Commissioning

Manufacturer's Engineer shall be on site for configuration, commissioning assistance and owner turnover. Manufacturer's Engineer shall be available for min. of 5 workdays (8hrs/day) including travel, lodging and meal expenses for Engineer.

User/Owner Training: Manufacturer shall provide training course for users consisting of min. of 3 working days (8hrs/day) including travel, lodging and meal expenses for Training Technician.

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