



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

January 6, 2006

SUBJECT: Various Routes
Section 2005-0541
Various Counties
Contract No. 60A32
Item No. 100, January 20, 2006 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 20, 24, 45, 52, 53, 86, 89 and 167 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,

Michael L. Hine
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: Diane O'Keefe, Region 1, District 1; Roger Driskell; Estimates; Design & Environment File

TBW:TK:jc

- District 1 Traffic Control & Protection, Revised 2-9-05
- Work Site Protection Manual

National Standards, Specifications and Regulations

- Insulated Cable Engineers Assn. and Underwriters Laboratories publications when applicable for cable and other materials
- National Electrical Manufacturers Association Standards, American National Standards Institute, where applicable, for signals, lamps, ballasts, and other accessories
- American National Standards Institute, where applicable, for ballasts, and other accessories
- ASTM Standards for materials
- All applicable manuals and policies of FHWA
- National Electrical Code, National Fire Protection Association, Batterymarch Park, Quincy, MA 02269, approved by the American National Standards Institute, Publication #ANSI/C2, published by IEEE, 345 E. 47th Street, New York, NY 10017
- Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals AASHTO Publication
- Emergency Response Guidebook by U.S. Dept. of Transportation, latest version, for further assistance call National Response Center (NRC) 1-800-424-8802
- Hazardous Materials Regulations, Hazardous Materials Transportation Uniform Safety Act of 1990, Hazardous Materials Regulations and Motor Carrier Safety Regulating by U.S. Department of Transportation
- OSHA, all applicable regulations
- Federal Communications Commission

Add the following to Section 801 of the Standard Specifications:

Cable Identification. Each wire installed shall be identified with its complete circuit number at each termination, splice, junction box or other location where the wire is accessible.

Cable Fuse Installation. Standard fuse holders shall be used on non-frangible (non-breakaway) installations and quick-disconnect fuse holders shall be used on frangible (breakaway) installations. Wires shall be carefully stripped only as far as needed for connection to the device. Over-stripping shall be avoided. An oxide inhibiting lubricant shall be applied to the wire for minimum connection resistance before the terminals are crimped-on. Crimping shall be performed in accordance with the fuse holder manufacturer's recommendations. The exposed metal connecting portion of the assembly

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Expressway/Application	2006	2007
Bishop Ford Expressway	5	2
Dan Ryan Expressway	4	13
Edens Expressway	2	
Elgin-O'Hare Expressway	1	
Eisenhower Expressway	9	19
Stevenson Expressway	21	
I-57 Expressway	34	
Kingery Expressway	7	
Kennedy Expressway	35	
District 1 HQ	1	
REVLAC	41	
RACS	7	

CCTV associated equipment, i.e. video transceivers, codecs, video transmission and distribution equipment, switching equipment, video servers, video work stations, wireless links fiber optic patch panels, fiber jumpers, two Cisco Catalyst 3750 24 port Gig-E switches, two Cisco Catalyst 3750 12 port Gig-E switches, seven Cisco 1000BASE-ZX SFP modules, one Cisco 1000BASE-ZX SFP module, etc., are at the following locations:

- equipment at the I-55/ Dan Ryan interchange
- equipment at I-57 North and South Huts and at I-57/I-294 hut (to be installed under Ryan contract)
- equipment at UIC Building
- equipment at REVLAC Buildings A, B, C, D, and E
- equipment at the Traffic Systems Center in Oak Park
- equipment at the Region 1 Headquarters Com Center in Schaumburg
- equipment at the Roosevelt Ramp Building, Hillside, Nordic and Schaumburg Towers
- equipment at IDOT Pump Station No. 5
- equipment at the ITS Office in Schaumburg
- Gary Chicago Milwaukee (GCM) Gateway Equipment in the Tollway facilities
- equipment at IL 53/I-290 at Schaumburg Road
- various microwave/fiber links between the equipment locations

The RACS cameras are mounted on the radio tower at the Hillside communications Hub (3) and the radio tower at the Nordic Tower, with pictures transmitted to a central camera selection, control and switching system at the Region 1 Headquarters Com Center. The cameras on Ryan, and Kingery expressways and few cameras on I-290 and Kennedy expressways are mounted on towers. The transceivers for I-55, I-57 and I-290 cameras (pole-mounted cameras) are located in the Surveillance System cabinets. The Contractor shall coordinate with the Electrical Maintenance Contractor for access to the Surveillance cabinets and for lowering devices for maintenance of the light tower mounted cameras. The central system has the capacity and provisions to add cameras Region-wide so that an overall common system for the cameras will be in place. Any new cameras, which are added to the system under the contract, shall be covered under routine maintenance for the remaining period of the Contract.

The CCTV system includes all of the above elements, including cameras, interconnecting fiber and cable, control and switching equipment, monitors, and all interfaces to communications network equipment.

CCTV field equipment is dispersed within the Region, at REVLAC locations, at RACS locations, at HQ and on expressways, with central control at the IDOT Region 1 Com Center and additional equipment at the Traffic Systems Center in Oak Park.

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The Contractor is required to have a minimum of two workstations with Windows XP or 2000 OS and internet explorer, (one of which must be located in the Contractor's Dispatch facility), with sufficient speed and memory to run EMCMS software, and necessary T-1 phone lines, routers, etc, in place for inspection by the Engineer, by March 15, 2006. The connections and the set-up of the EMCMS servers for the new workstations shall be performed by the maintainer of the EMCMS.

In case of disruption of service, all Contractor EMCMS equipment, (all hardware, and communications lines between the IDOT headquarters computer and all remote terminals) shall be restored within eighteen (18) hours, except as otherwise permitted by the Engineer. The Contractor shall have sufficient staff or have a sub-contractor in place to maintain the EMCMS workstations and communications links.

The Contractor is responsible to have the approved maintainer of EMCMS to perform necessary programming corrections due to Contractor database entry errors or printing errors or other malfunctions during the course of his work. If the Contractor finds a need to modify or add tables, screens and reports in the EMCMS to aid him in contract management or to improve the productivity of his personnel, he may do so upon approval of the Engineer, but only through the approved maintainer.

In addition, the Contractor's maintainer of EMCMS shall modify and add parameter selection by the contract number to the existing reports to enable printing those reports by the contract number. These reports include all non-routine work processing reports; budget report; and authorization and quote letter reports. Form modifications shall be made to the year-end contract roll-over ability, calendar and fiscal year maintenance, and ASMC personnel names and titles for EMCMS reporting. This work shall be completed by October 1, 2006.

Refer to Article 6.0 Work Documentation requirements for EMCMS data entry requirements. No other method of billing or work documentation shall be allowed. All costs for installation of EMCMS workstations, printers, their operation and maintenance, including revisions as described above, shall be borne by the Contractor and shall be included in the routine maintenance.

Site Inspection

As part of the site inspection visits offered by the Department prior to bidding, a limited tour of the EMCMS equipment and operations at the Electrical Operations Field Office in Schaumburg, IL, and the Region 1 Headquarters in Schaumburg will be offered to familiarize bidders with the procedures.

4.6 FACILITIES

4.6.1 GENERAL REQUIREMENTS

The Contractor shall have and maintain adequate facilities at all times for timely completion of work under this contract. At the time of bidding, the Contractor shall have an established business presence in the Region 1, preferably a headquarters, to assure the timeliness of the assumption of the contract work.

A minimum of one (1) Contractor facility, shall be a permanent building, strategically located geographically within the Region, to support the Contractor's work force, and shall meet all applicable building codes, and shall be equipped with adequate electric service, heat, air conditioning, telephone service, computer equipment for email communications, EMCMS equipment, a central-station security alarm system or equivalent, and restroom facilities. It is expected that the Contractor's dispatch center would be located at this facility (refer to Article 4.6.3). The Contractor may, however, implement other facility location(s) for the contract work and/or dispatching of personnel, subject to the approval of the Engineer.

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4.10 TRAFFIC CONTROL AND SAFETY PROGRAMS

4.10.1 TRAFFIC CONTROL AND SAFETY

The traffic control shall be in accordance with the applicable sections of the Standard Specifications, the Supplemental Specification, the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", any special details and Highway Standards contained in the plan, and the IDOT Region 1 Traffic Control Plan for the Electrical Maintenance Contract (EMC), and IDOT District 1 Keeping the Expressway Open to Traffic, revised 2-9-05. The Contractor shall give special attention to Articles 107 and section 700 of the Standard Specifications.

4.10.2 KEEPING THE EXPRESSWAY OPEN TO TRAFFIC

Whenever work is in progress on or adjacent to an expressway, the Contractor shall provide the necessary traffic control devices to warn the public and to delineate the work zone as required in these Special Provisions, the Standard Specifications, the State Standards and the District Freeway details. All Contractor's personnel shall be limited to these barricaded work zones and shall not cross the expressway.

The Contractor shall request and gain approval from the Illinois Department of Transportation's Expressway Traffic Operations Engineer (847-705-4151) twenty-four (24) hours in advance of all daily lane, ramp and shoulder closures and seventy-two (72) hours in advance of all permanent and weekend closures on all Freeways and/or Expressways in District One. This advance notification is calculated based on workweek of Monday through Friday and shall not include weekends or Holidays.

Lane closures hours along mainline Kennedy Expressway, if needed, will be determined by the Expressway Traffic Section and must be requested in advance. Below are allowable hours for closing the reversible lanes along the Kennedy Expressway. These hours may be later if other contractors are working along mainline.

I-90/94 KENNEDY REVERSIBLE LANES

WEEK NIGHT		ALLOWABLE HOURS TO BE CLOSED					
Sunday	thru	9:00 P.M.		to	5:00 A.M.		
Thursday							
Friday		11:00 P.M.	(Fri)	to	6:00 A.M.	(Sat)	
Saturday		11:00 P.M.	(Sat)	to	8:00 A.M.	(Sun)	

In addition to the hours noted above, the reversible lanes/gates can be requested to be closed Monday, Tuesday or Wednesday between 11 am to 1 pm for routine maintenance activities. Also, temporary shoulder closures are allowed weekdays between 9 AM and 3 PM and any time on weekends.

All daily lane closures shall be removed during adverse weather conditions such as rain, snow, and/or fog and as determined by the Engineer. Additional lane closure hour restrictions may have to be imposed to facilitate the flow of traffic to and from major sporting events and/or other events.

All lane closure signs shall not be erected any earlier than one-half (1/2) hour before the starting hours listed above. Also, these signs should be taken down within one-half (1/2) hour after the closure is removed. The Contractor will be required to cooperate with all other contractors when erecting lane closures on the expressway. All lane closures (includes the taper lengths) without a three (3) mile gap between each other, in one direction of the expressway, shall be on the same side of the pavement. Lane closures on the same side of the pavement with a half (1/2) mile or less gap between the end of one work zone and the start of taper of next work zone should be connected. The maximum length of any lane closure on the project and combined with any adjacent projects shall be three (3) miles. Gaps between successive permanent lane closures shall be no less than two (2) miles in length. Private vehicles shall not be parked in the work zone.

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Contractor's equipment and/or vehicles shall not be parked on the shoulders or in the median during non-working hours. The parking of equipment and/or vehicles on State right-of-way will only be permitted at the locations approved by the Engineer.

4.10.3 PAYMENT FOR TRAFFIC CONTROL

Traffic Control and protection will not be paid separately but shall be considered as incidental to the contract, and the cost for all work shall be included as part of the unit bid prices for the routine maintenance pay items. These contract unit prices for routine maintenance shall be payment in full for all labor, materials, transportation, handling and incidentals necessary to furnish, install, maintain, replace, relocate and remove all traffic control devices indicated in these specifications.

The Engineer may require additional traffic control and protection for certain authorized non-routine work requiring major lane or ramp closures for equipment modifications/construction. (Shoulder closures are excluded.) Additional payment will be made for this work in accordance with the applicable unit bid prices of the non-routine pay items included in this Contract.

4.10.4 DEFICIENCIES AND LIQUIDATED DAMAGES

Upon notification from the Engineer or Department Expressway/Traffic Operations personnel the Contractor shall dispatch qualified personnel immediately to make needed corrections of deficiencies that constitute an immediate safety hazard and/or the blocking of traffic lanes or ramps.

Should the Contractor fail to completely open and keep open all the traffic lanes to traffic or fails to restore the required traffic control and protection, in accordance with the limitations specified under the Special Provisions for "Keeping the Expressway Open to Traffic", the Engineer will impose daily monetary liquidated damages for each 15 minute interval (or portion thereof) that the deficiency exists. This time period will begin with the time of notification to the Contractor and end with the Resident Engineer's acceptance of the corrections.

\$1000.00	Improper Use of Traffic Control (per instance)
\$2000.00*	Blocking Lane or Ramp to Traffic
\$5000.00*	Blocking Two Lanes to Traffic

*per each and every 15 minute interval or portion thereof that a lane is blocked outside the allowable time limitations

4.11 SAFETY PROGRAM

4.11.1 GENERAL REQUIREMENTS

The Contractor shall establish a formal Safety Program to assure overall safety of ASMC personnel, operations and the electrical systems maintained as they affect the safety of the motoring public and the public at large. The Contractor shall furnish an overall description of this program at the Pre-Construction Meeting.

As part of the Safety Program, the Contractor shall initiate a procedure that states: "When a circuit is de-energized, the Contractor shall meter the downstream circuits with an instrument to assure that they are de-energized and safe for working conditions." The Contractor shall be fully responsible for compliance with all OSHA requirements. Particular attention is directed to the lock-out/tag-out requirements to assure that systems undergoing maintenance work cannot be inadvertently energized, causing harm to maintenance person.

The Contractor shall assure that all personnel be trained in, and have knowledge of, approved equipment grounding methods for all work under this contract. The Contractor shall be fully responsible for compliance with all NEC requirements.

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BASIS OF PAYMENT

This work shall be paid at the contract unit price each for **CCTV CAMERA ASSEMBLY, COLOR, FIXED CONTROL, FURNISH AND INSTALL**, which price shall be payment in full for furnishing and installing the camera and salvaging the old camera and associated equipment, as directed by the Engineer.

ACC2 CCTV CAMERA ASSEMBLY, REMOVAL AND SALVAGE

DESCRIPTION

This item shall consist of the removal, transportation to State Stock, and unloading as salvage, a CCTV camera and its appurtenances. The camera may be a fixed position camera or a camera with a PTZ mechanism, but not a dome camera. Dome cameras are covered under items ACC12-ACC14.

TRANSPORTATION

The Contractor shall transport, handle and store (as applicable) the CCTV cameras in complete conformance with the manufacturer's recommendations.

REMOVAL

The CCTV camera shall be removed in accordance with the CCTV camera manufacturer's instructions.

BASIS OF PAYMENT

This item shall be paid at the contract unit price each for **CCTV CAMERA ASSEMBLY, REMOVAL AND SALVAGE**, which shall be payment in full for the work as described herein.

ACC3 CCTV CAMERA, FURNISH AND INSTALL

DESCRIPTION

This item shall consist of furnishing and installing a CCTV Camera. The camera may be a fixed position camera or a camera with a PTZ mechanism, but not a dome camera. Dome cameras are covered under items ACC12-ACC14.

TRANSPORTATION

The Contractor shall transport and handle the CCTV cameras in complete conformance with the manufacturer's recommendations.

INSTALLATION

The CCTV camera shall be installed in accordance with the CCTV camera manufacturer's installation instructions except as noted herein.

BASIS OF PAYMENT

This item shall be paid at the contract unit price each for **CCTV CAMERA, FURNISH AND INSTALL**, which shall be payment in full for the work as described herein.

ACC4 CCTV CAMERA POLE, FURNISH ONLY

DESCRIPTION

This item shall consist of furnishing and delivering to State Stock, a CCTV camera pole, up to 30' high, complete with CCTV camera mounting brackets as manufactured by Union Metal Inc., or as approved by the Engineer, identical to the existing CCTV camera poles in use.

BASIS OF PAYMENT

This work shall be paid at the contract unit price each for **CCTV CAMERA POLE, FURNISH ONLY**, which price shall be payment in full for furnishing and delivering the materials to State stock as specified herein and as directed by the Engineer.

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The camera-lowering device shall be operated by use of a portable lowering tool. The tool shall consist of a lightweight metal frame and winch assembly with cable as described herein, a quick release cable connector, an adjustable safety clutch and a variable speed industrial duty electric drill motor. This tool shall be compatible with accessing the support cable through the hand hole of the pole. The lowering tool shall attach to the pole with one single bolt. The tool will support itself and the load assuring lowering operations and provide a means to prevent freewheeling when loaded.

All electrical and video coaxial connections between the fixed and lowerable portion of the contact block shall be protected from exposure to the weather by a waterproof seal to prevent degradation of the electrical contacts. The electrical connections between the fixed and movable lowering device components shall be designed to conduct high frequency data bits and one (1) volt peak-to-peak video signals as well as the power requirements for operation of dome environmental controls.

The interface and locking components shall be made of stainless steel and or aluminum. All external components of the lowering device shall be made of corrosion resistant materials, powder coated, galvanized, or otherwise protected from the environment by industry-accepted coatings to withstand exposure to a corrosive environment.

The camera-lowering device shall be in production and in successful use for a highway application for a minimum of 3 years. The camera lowering device shall be the [MG]² Model CLDMG2-HYP-XXX or approved equal.

BASIS OF PAYMENT

This item shall be paid at the contract unit price each for a **CCTV CAMERA LOWERING SYSTEM, FURNISH AND INSTALL**, which shall be payment in full for the work as described herein.

ACC11 CCTV CAMERA MOUNT FOR LIGHT TOWER, RETROFIT

DESCRIPTION

This item shall consist of furnishing, retrofit as necessary, and install a CCTV camera mount on the tower ring, one fiber transceiver in an existing box at the base of the light tower, and terminate the camera wiring on the transceiver, as directed by the Engineer.

Modifications to the tower ring lowering assembly, cable and breakout of the cable are not included in this item and shall be performed by the State's Electrical Maintenance Contractor.

The camera mount shall be designed to support and lower a standard closed circuit television camera, lens, housing, PTZ mechanism, cabling, connectors and other supporting field components without damage or causing degradation of camera operations.

BASIS OF PAYMENT

This item shall be paid at the contract unit price each for furnishing and installing a **CCTV CAMERA MOUNT FOR LIGHT TOWER, RETROFIT**, which shall be payment in full for the work as described herein.

ACC12 CCTV DOME CAMERA ASSEMBLY, COLOR, PTZ CONTROL, FURNISH ONLY

DESCRIPTION

This item shall consist of furnishing and delivering to State stock a Color CCTV dome camera assembly complete with housing as manufactured by Bosch, Inc. Model ENVE-26x-2460 with external transformer or approved equal suitable for integration into the existing system. The assembly shall include a high performance color camera with image stabilization, 26X optical zoom or better, and 12X digital zoom.

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interface, and 5) RS232 serial port. Two antennas are required for this radio unit and shall be installed with antenna spacing as specified by the manufacturer. Radio frequency communications will be capable of a data transmission rate of 19.2kbps or greater. The radio frequency used will be provided by the Engineer.

INSTALLATION

The installation shall include all work necessary to install, wire, integrate, set-up all communications to the AVL server, configure the complete system so as to provide a completely operational AVL unit in the vehicle. Testing shall be done in the presence of the IDOT Engineer.

BASIS OF PAYMENT

This work shall be paid for at the contract unit price each for, **AVL3 RADIO MODEM, FURNISH AND INSTALL** which price shall be payment in full for furnishing, installing and testing the unit for a completely functional AVL unit in the vehicle, as specified herein and as directed by the Engineer.

AVL4 AVL SYSTEM WORKSTATION, FURNISH AND INSTALL

DESCRIPTION

This item shall consist of furnishing, installing and integrating a completely operational user workstation at locations specified by the Engineer and shall be coordinated and integrated with the AVL equipment specified elsewhere in the Contract. The workstation shall be initially configured to simultaneously interface with 150 AVL equipped vehicles with wireless AVL, Status and Two-Way Text messaging packages and shall be easily software configurable to interface with no less than 1,800 AVL equipped mobile units, and a network of up to 12 other workstations. The manufacturer shall provide a two-year parts, software and factory labor warranty. The manufacturer shall have provided such systems for at least 3 years and furnished at least 30 such controllers to other highway departments, airports or utility companies. The proposed controller shall have been previously distributed and must be a current version. All software licensing fees shall be included in the bid price for this pay item. No subsequent licensing, leasing fees shall be required for continued use of the system.

The workstation shall continuously collect vehicle location, speed, direction, status and other information from the mobile units. It shall provide the work station users with manufacturer's customary full complement of services that shall include: vehicle facility, landmark and other information overlaid on user selected maps in accordance with individual requests from each workstation; graphically representing vehicle location, speed, direction and status for all vehicles in the selected map area; graphically representing the same information in the selected map area for only selected radio call numbers; a map showing the location and nearby vehicles based on a query for a specific vehicle from a workstation; a graphical replay of a selected vehicle over a selected interval; and current historical reports by date, vehicle, locations, etc. The application software package shall be capable of being custom enhanced to obtain and display real time operational statistics such as the number of vehicles engaged in plowing and/or salting, percentage of routes completed, etc. Capability for other future graphical enhancements shall include real time tracking of routes plowed, salted, pot hole repaired, etc.

The workstation hardware, Dell or approved equal, shall include as a minimum: Pentium 4, 2+ GHz, 1 GB RAM, 80 GB Hard Drive, Floppy Drive, 24X CD-ROM Drive, 100 Mbps NIC, 17" LCD monitor, PS/2 mouse, keyboard; software compatible with the Department's current choice of Microsoft and ESRI (ARC) suite of products for OS, DB, word processing, report generation, graphical user interface, mapping etc. For a client workstation; Ethernet switch; router; appropriate printer and application software, PRI Advantage or approved equal. The software shall also include a mapping software package to include Lake, McHenry, Cook, DuPage, Kane and Will counties plus ten mile perimeter extending into adjacent Illinois, Indiana and Wisconsin counties with subscription based update services.

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