

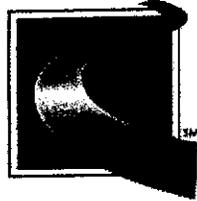
August 13, 2007

TO ALL PURCHASERS OF CONTRACT DOCUMENTS:

Addendum No. 2

RE: Contract No. MA-992-000-006
Furnish and Install CCTV Cameras and
Related Equipment

ALL FACILITIES



**Maryland
Transportation
Authority**

Martin O'Malley
Governor

Anthony Brown
Lt. Governor

John D. Porcari
Chairman

Susan M. Affleck Bauer, Esq.
Rev. Dr. William C. Calhoun, Sr.
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authority.com

www.mdtransportation
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Gentlemen:

It is important that you acknowledge receipt of this Addendum No. 2 on the
referenced contract regardless if you will be bidding or not bidding.

Very truly yours,

Keith A. Duerling, P.E.
Director of Engineering

KAD/mdj

Enclosures

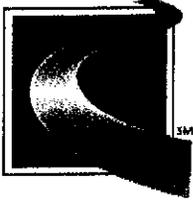
Contract No. MA-992-000-006

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NAME OF COMPANY

SIGNATURE

DATE



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RE: Contract No. MA-992-000-006
Furnish and Install CCTV Cameras and
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Gentlemen:

- A. The Proposal due date has been delayed until **4:00 p.m. on August 31, 2007.**
- B. In Volume I, delete pages 60 and 64, and replace with pages numbered the same dated August 9, 2007, Addendum #2.
- C. Attached are responses to questions submitted.

Very truly yours,

Keith A Duerling, P.E.
Director of Engineering

KAD/mdj

THIS ADDENDUM MUST BE ATTACHED TO THE OUTSIDE COVER OF THE PROPOSAL FORM. FAILURE TO DO SO MAY RESULT IN REJECTION OF YOUR BID.

THE ATTACHED RECEIPT MUST BE RETURNED TO THIS OFFICE. FAILURE TO RETURN THE RECEIPT MAY RESULT IN REJECTION OF YOUR BID.



SPECIAL PROVISIONS

Test Procedure Submittal	The Contractor's submittal shall provide detailed procedures on how the system will be tested to verify compliance with all requirements. The procedures shall include standalone CCTV cabinet tests, as well as integrated tests from the AOC Central.	Contractor
Test Procedure Approval	MdTA reviews and approves or rejects the submittals.	MdTA
Operations Training Submittal	The Contractor's training submittal for operations of the CCTV system in accordance with Contract. Thirty (30) calendar-days before system acceptance, the Contractor shall provide System Operational Training for the hardware, software and communications deployed as part of this Contract.	Contractor
Operations Training Submittal Approval	MdTA reviews and approves or rejects the submittals.	MdTA
Operations Training Conduct	Contractor operations training.	Contractor
Acceptance Testing	Acceptance testing to verify functionality of the CCTV site. Includes retesting as required to address discrepancies.	Contractor
Site Commissioned	Official operations and activation declaration.	MdTA
Maintenance Training Submittal	Contractor's training submittal for maintenance of the CCTV system in accordance with Contract. Ninety (90) calendar-days before the maintenance period ends, the Contractor shall provide System Maintenance Training for the hardware, software and communications deployed as part of this Contract.	Contractor
Maintenance Training Submittal Approval	MdTA reviews and approves or rejects the submittals.	MdTA
Maintenance Training Conduct	Contractor maintenance training.	Contractor
Progress Meetings	The Contractor shall meet with MdTA a least once per month for the duration of this Contract, to discuss technical, cost, and schedule progress and issues.	Contractor/MdTA

MAINTENANCE OF TRAFFIC

The Authority will be responsible for maintaining traffic for all work under this Contract, including Preventive and Corrective Maintenance work to be performed. It is anticipated that MOT for this project will consist of shoulder closures. The Contractor shall contact the Authority, at least seven (7) calendar-days before beginning work. The Contractor shall provide a schedule of cameras to be serviced and receive authorization from the Authority before beginning work. The Contractor will be required to provide all tools, materials, rental of equipment, materials, and all incidentals. The work schedule and traffic control plan will need to be reviewed and approved by the Authority before beginning work.

DESIGN OVERVIEW

The Authority will decide on a case-by-case basis, which type of camera installation is to be installed by the Contractor. There are two types of installations the Contractor will be required to install as described below.



SPECIAL PROVISIONS

REQ'T NUMBER	FEATURE	SPECIFICATION
9.	Privacy Zones/ Sectors/Areas	The camera/receiver shall support a minimum of 16 sectors (or zones or areas) with the ability to blank the video in any sector. Additionally, the camera shall support two sizeable privacy masks that relate to the PTZ position.
10.	On-Screen Zones/ Sectors/Areas	The camera/receiver shall support a minimum of 20 characters for on-screen camera, preset, sector, or alarm titles. The camera shall have an on-screen/video compass display. The compass shall be settable to indicate North.
11.	On-Screen Text	The camera/receiver shall support text for the camera name, preset name, and sector name (alarms and zoom level are not required). The user shall be capable of locating the titles in different positions on the screen image.
12.	On-Screen Logo	Contractor specified.
13.	Variable Speed Tilt	The camera PT unit shall support a variable speed tilt capability with a minimum of 110° per second at the highest rate.
14.	Variable Speed Pan	The camera PT unit shall support a variable speed pan capability with a minimum of 300° per second at the highest rate.
15.	Adjusted Pan/Tilt Speed	The camera PT unit shall support a proportional speed Pan/Tilt capability, where the speed decreases automatically as the zoom level increases.
16.	Pan Range	The camera PT unit shall provide a 360° continuous pan capability, without cable interference or tangling.
17.	Tilt Range	The camera PT unit shall provide a -2.5° to 95° tilt capability.
18.	Number of Presets/Performance	The camera/receiver shall support a minimum of 79 presets. The movement to the preset shall occur within one second (maximum) and with 0.3 degrees accuracy.
19.	Preset Labels	The camera/receiver shall support a capability to label each preset, with a minimum of 20 characters per preset label.
20.	Patterns/Tours	Contractor Specified. Note that tours at camera level are optional, tours at the switch level are more important. A minimum of eight tours with 32 steps per tour is required. Additionally, there shall be two auto-tours.
21.	Number of Pixels	The camera shall support a minimum of 768H x 494V pixels.
22.	NTSC Resolution	The camera shall support a minimum of 470H TVL NTSC resolution.
23.	Imager/Sensor Size	The camera shall provide an imager/sensor size of 1/4".
24.	Imager Area	Contractor specified.
25.	Lens Size	The camera shall have a 1/4" lens.
26.	Lens Focal Length	The camera shall have a 3.4mm to 119mm minimal lens focal length.
27.	Color-Auto BW	The camera shall have a Color/BW capability with an automatic and manual selection. The camera shall transition automatically to a BW mode (when in automatic mode) when the luminance reaches a predefined threshold (used during nighttime or low luminance condition).
28.	Lens Sensitivity	The camera sensitivity shall vary between day and night, by reverting to quasi-monochrome operation at night. At all times, the camera shall provide 30 FPS output. Long-term integration is not acceptable.
29.	Auto IRIS	The camera shall provide an auto iris mode with a manual override.
30.	Dome Housing	The camera dome housing shall be provided by the camera manufacturer as an integrated product; see Table 6-3 (Dome Specs).

Addendum No. 2

MA-992 – Furnish and Install CCTV and Related Equipment Questions Received After Pre-Proposal Meeting on 7/11/07 and Before Deadline on 8/3/07

Question #1: What are the exact model numbers and version numbers of the existing MdTA video encoders, decoders and software?

Answer #1: The encoders and decoders are from Impath and the model number is I-Volution VSG 1000. The encoder (VSG-1000-E) and decoder (VSG-1000-D) cards are interchangeable. Each VSG encoder/decoder card can encode or decode two video streams and two serial data channels over an IP network. The firmware revision is 3.01.6, and the boot loader is revision 1.0.3.

Question #2: What is the extent of the current iMPath installation? How many encoders, decoders, and locations where software is being used currently exist?

Answer #2: There are approximately 10 VSG chassis installed at 10 hub sites throughout the State, as far North as the I-95 JFK Toll Plaza and as far South as the Harry W. Nice Toll Plaza. All hub sites are environmentally controlled. There are approximately 35 encoder cards, and 30 decoder cards.

Question #3: Can you elaborate on some of the project milestones such as when the product demonstration and evaluation are expected to begin?

Answer #3: The demonstration and evaluation are described in Sections 2.5, 4.3, 4.7, and 5.1 of Volume I - Special Provisions. The demonstration and evaluation, if deemed necessary, will begin after proposals are received and evaluated, and completed prior to selection. This is described in Section 2.5 of Volume I – Special Provisions. A schedule will be provided to all firms deemed qualified.

Question #4: Page 60, Maintenance of Traffic States: “The Authority will be responsible for maintaining traffic for all work under this contract, including Preventive and Corrective Maintenance work to be performed.” The paragraph also states “The Contractor will be required to provide ... materials, including attenuator, and all incidentals”. Materials such as “attenuator” are normally considered scope of MOT, which the paragraph indicates will be provided by the Authority.

Please clarify what scope of MOT will be provided by the Authority and what scope will be provided by the Contractor.

Also, please clarify if the defined Contractor-furnished MOT is applicable to all facilities (i.e., we understand MOT in the tunnel facilities must be exclusively provided by the Authority.

Answer #4: We are revising the MOT requirements and an addendum will be issued shortly with those changes. The changes are anticipated to incorporate an each item to provide shoulder closures and an each item to provide lane closures that may be required to complete the work.

Question #5: Page 62, section 6.1 states: “Contractor shall provide the same make camera, model camera, and firmware version of the camera for the entire life of the contract.” The Contractor does not have control over vendor product line (make, model, and firmware) and market conditions. Such decisions could result in a situation where the specified components are no longer unavailable.

Given the term of this project could be 5 years, please clarify the Authority’s intent to enforce this requirement.

Answer #5: The Authority recognizes the limitations of the marketplace. In the event that the manufacturer announces an end-of-sale or end-of-life for a particular make/model camera or firmware revision within the 5-year contractual period of performance, the Contractor shall notify MdTA and the decision will be made if additional spares are to be purchased using the line items in this Contract (reference Section 6.20 of Volume I – Special Provisions). If the purchase of additional spares is not possible, a substitute comparable model shall be selected with the approval of the Authority that fully supports the protocol of the legacy equipment. The substitute equipment shall be supplied at the same or reduced price; a price increase for substitute equipment will not be permitted. It is suggested that Proposers provide clarification and documentation as to the suppliers commitment to provide and support a stable product line and to remain backwards compatible with future product lines.

Question #6: Is there an incumbent? If so, who is the incumbent?

Answer #6: There is no incumbent on this Contract, as this is the 1st CCTV RFP-type contract the Authority has issued. However, Cable Constructors, Inc. is the Contractor who has furnished and installed many of the existing PTZ cameras along the freeway and fixed cameras inside the tunnels through several contracts previously issued by the Authority.

Question #7: Is the project currently funded? If so, how much is the funding?

Answer #7: The Contract is currently funded. Page 6, Project Description, of Volume I – Special Provisions lists the Project Classification (i.e., Class E).

Question #8: What is the infrastructure backbone? Is the software system developed by the State of Maryland or is it a COTS item?

Answer #8: The infrastructure backbone primarily consists of Gigabit Ethernet using OSI Layer 3 Cisco routers running over state-owned single mode fiber optics (SMFO). The software used to control the cameras and display the video is State Highway Administration’s (SHA) CHART software.

Question #9: Would the state consider a two-week extension for the bid?

Answer #9: The proposal due date has been adjusted to allow time for the questions and answers contained herein to be considered by the Proposers and to allow time for the anticipated addendum regarding maintenance of traffic.

Question #10: Is there an existing Video Matrix Switch and does it have the capacity to add the additional cameras?

Answer #10: Yes, there are two existing video switches. One at the Fort McHenry Tunnel East Vent Building that is sized at 256 inputs x 64 outputs and one at the Baltimore Harbor Tunnel Fairfield Service Building that is sized at 64 inputs x 64 outputs. Both currently have spare inputs and outputs and are further expandable. At MdTA's option, the video switch may be eliminated at a future date, since a) video data is being multicasted and can be decoded via software, b) CHART supports the ability to control the cameras via TCPIP, and c) CHART supports the ability to control decoders to switch the multicast address being decoded (in essence functioning as a network based video switch).

Question #11: Are there any drawings available that show a block diagram of the CHART system and its components? This would be useful in determining what interfacing is needed.

Answer #11: All available CHART documentation is available at this site:

<http://www.chart.state.md.us/readingroom/readingroom.asp>

Note: CHART manages the interface to the MdTA's video switches, cameras, encoders, and decoders from a CHART server at the AOC. The interface from CHART to the MdTA switches and MdTA cameras for PTZ is serial RS-422. The interface to the MdTA switches for video routing is via Ethernet/TCPIP for routing control. The interface from CHART to the encoders/decoders is via Ethernet/TCPIP. CHART also supports TCPIP to the cameras for PTZ via Coretec or Impath encoders. The Contractor should have knowledge and experience configuring any of the devices supplied under this contract for serial or TCPIP-based communications and to conform to existing CHART interfaces as defined in the Special Provisions (e.g., page 65 and 102).

Question #12: Regarding the request for a COST Plug-In for MS Internet Explorer, is there a particular module you have in mind? If so can we get the product name, model number, and manufacturer?

Answer #12: No. The Plug-In should be provided by the encoder/decoder manufacturer or a 3rd party that is capable of a) decoding the video from a Web Browser and b) displaying the video in a window on the PC. Reference Section 6.5 of Volume I – Special Provisions for more information. Also keep in mind the Authority's desire for dual MPEG-2/MPEG-4 software decoders as expressed in Section 4.7 and elsewhere in Volume I – Special Provisions. The current plug-in is supplied by Impath but only functions with MPEG-2 video.

Question #13: If we provide equal and compatible cameras and encoders is there any further software integration required? Are there any additional RS-232 to 422 converters required.

Answer #13: The Contractor shall furnish and install all hardware, software, firmware, tools, equipment, materials, supplies, and manufactured articles as required. The Contractor shall also perform all operations, configuration, cabling, and equipment integration necessary, including integration with CHART and MdTA's existing equipment, to construct a fully operational CCTV system that meets the specifications as described in Volume I – Special Provisions. Any necessary software integration and RS-232/422 converters are the responsibility of the Contractor and dictated by the Offeror's proposed design within the constraints of the existing system's capability (including CHART and MdTA's CCTV hardware and software). It should be noted that CHART supports IP-

based PTZ to both Impath and Coretec field encoders, so the need for RS-232/422 converters can be minimized, if not avoided.

Question #14: Ref Page 62 - Paragraph 6.1 states that we are to provide replacement cameras and other parts that have the same revision software for the duration of the contract. Is current revision level acceptable as long as it is backwards compatible?

Answer #14: Yes, but special caution should be taken to ensure the protocol is compatible with CHART.

Question #15: Ref Page 66 item 41 - Can we assume that the SHA CHART software already uses a compatible protocol with both the Cohu and the Vicon cameras? Also the testing and maintenance software would be the same as you already using for testing at the local site?

Answer #15: CHART has drivers for both the Cohu and Vicon protocols currently implemented. The protocol that CHART uses for Cohu and Vicon is documented on page 65, item 39. Yes, testing and maintenance software would be the same as in-use today, provided the Contractor procures camera equipment that meets the protocol specification. It is the Contractor's responsibility to test the equipment to ensure compatibility with CHART. MdTA will provide copies of Cohu and Vicon laptop software for testing, if necessary, after contract award.

Question #16: What is the local control panel? Does it provide PTZ functions or is it just a connection point for the laptop where the lap top does PTZ functions?

Answer #16: The local control panel is described in detail at the top of page 69 of Volume I – Special Provisions. It is only a connection point for the laptop or diagnostic equipment and provides no PTZ controller/joystick.