

Background

The Borough of Naugatuck Police Department is looking to provide an IP camera system to monitor and provide coverage of the new impound lot. The system will be directly compatible with the existing Exacq DVR system. The purpose of this RFP is to select a contractor to provide a system which meets all the enclosed specifications.

Vendor Qualifications

This project includes equipment, installation, and optimization. All vendors must provide at least 3 references for completed similar projects completed for municipal public safety agencies.

Vendor must utilize R56 certified installers and install all equipment to R56 specifications.

Vendors must be authorized to sell Exacq and Arecont equipment and provide a letter from the manufacturer or distributor affirming this.

Vendors will be responsible to integrate to the existing Exacq and Arecont DVR system and configure and optimize.

Vendor must provide 24x7 on call support for the system supplied. On call support must include an on call technician and engineer that are familiar with the Exacq and Arecont system.

All perspective vendors must become thoroughly familiar with requirements of this project. Those vendors must become familiar with the site, the installation requirements, and the coverage requirements of the impound lot. All perspective vendors must attend a mandatory pre bid walk through on Monday, August 27, 2012 @ 10am.

Instructions

Vendors must submit the included submittal form, and note any exceptions or clarifications. Any exceptions to the specifications should be listed in your bid response.

Only vendors that complete the pre bid walk through will be considered. It is the vendor's responsibility to become familiar with the site and the work to be performed.

All bid responses must be submitted by Monday, September 10, 2012 @ 11am. All bid responses must be submitted to the attention of Ms. Wendy Hozer, Purchasing Agent, Naugatuck Town Hall, 229 Church St., Naugatuck, CT 06770.

The Borough of Naugatuck reserves the right to reject any or all proposals or parts of proposals, to waive defects in same proposals, or to accept any proposal or part of thereof deemed to be in the best interests of the Borough of Naugatuck Police Department.

Naugatuck Police Impound Yard Camera Specifications

Two IP cameras will be installed to monitor the new impound yard

Both cameras will be fixed and together provide coverage of the impound area

Cameras may be mounted to existing poles

Cameras will be directly compatible with the existing Exacq DVR system

Each physical camera (enclosed unit) will only use one IP license in the existing IP recorder, regardless of the number of sensors incorporated by the physical camera

IP transport from the remote site to the PD will be via PTP. Copper connection between sites will NOT be accepted

Naugatuck will provide an enclosure with power to house the PoE switch and other devices as needed

All camera Ethernet cable will be run in conduit

Any cable not in conduit (i.e to a PTP radio) will be rated for outdoor use and enclosed in conduit to minimize cable exposure

Weather heads will be used as required

Network shall terminate in the electronics room located in the basement of the police department

Both cameras will have:

- The camera shall have a dome enclosure complying with IP66 weatherproofing standards
- The camera dome chassis shall be vandal resistant constructed of aluminum with a polycarbonate dome bubble
- The camera shall be surface mount with optional pendant mount or wall mount
- The camera shall be H.264 (MPEG4, Part 10) compliant
- The camera shall have dual standard compression support with simultaneous streaming of both H.264 and MJPEG formats
- The camera shall have multi-streaming support of up to 8 non-identical concurrent streams (different frame rate, bit rate, resolution, quality and compression format)
- The camera's bit rate control shall be selectable from 100 Kbps to 10 Mbps for each independent stream
- The camera shall have Real Time Streaming Protocol (RTSP) support allowing for compatibility with media players such as Windows Media Player, Apple QuickTime, VLC Player and others
- The camera's H.264 implementation shall maintain full real time video frame rates
- The camera shall feature streaming of the full field of view (FOV) and simultaneous multiple regions of interest (ROI) for forensic zooming
- The camera shall be equipped with a 100 Mbps LAN connector and can deliver image data at an un-throttled maximum data rate of up to 55 Megabits per second (55 Mbps)
- The camera shall provide 21 levels of compression quality for optimal viewing and archiving
- The camera shall support a minimum TFTP, HTTP, RTSP, RTP over TCP and RTP over UDP network protocols
- The cameras shall feature precision motion detection with a minimum of 64 detection zones
- The camera shall incorporate necessary algorithms and circuits to detect motion in low light with clarity
- The camera's primary power source shall be Power over Ethernet (PoE) complying with the IEEE 802.3af standard
- The cameras will have built in heaters
- The camera's operating ambient temperature shall be to -30°C (-22°F) to 50°C (122°F) for warm start conditions
- The camera shall be FCC Part 15, Class A, CE and RoHS compliant

One fixed 5 Megapixel camera will:

- The camera shall utilize a high sensitivity 5 Megapixel CMOS sensor with 1/2.5" optical format
- The camera shall have and integrated 4.5-10mm megapixel IR corrected varifocal lens with 1/2" optical format, F1.8.
- The camera shall output at a maximum resolution of 2592(H) x 1944(V) pixels at a maximum frame rate of 9 frames per second (FPS)
- It shall be possible to program the camera to output a variety of lower resolution images. i.e. 1280(H) x 1024(V) pixels at 32 FPS, or 1600(H) x 1200(V) pixels at 24 FPS
- The camera shall support a minimum illumination of 0.3 Lux @ F1.4 in color mode
- The camera shall support an IR sensitive minimum illumination of 0 Lux in B/W mode
- The camera shall feature automatic exposure, automatic multi-matrix white balance, shutter speed control, 50/60Hz selectable flicker control, programmable brightness, saturation, gamma, sharpness, windowing and decimation, simultaneous delivery of full-field view and zoomed images at video frame rate, instantaneous electronic zoom, pan and tilt and electronic image rotation by 180 degrees

- The camera shall have a 3-axis gimbal with 360° pan 90° tilt and 180° Zrotation for easy and accurate positioning

One 8 Megapixel camera will:

- The camera shall utilize four high sensitivity 2 Megapixel CMOS sensors each with 1/2" optical format.
- The camera shall integrate four 8mm megapixel IR corrected lenses and four motorized Day/Night switchers.
- The camera shall have a +/- 5° vertical alignment to locate the vertical position of each sensor
- The camera shall output at a maximum resolution of 1600(H) x 1200(V) pixels per sensor for a total resolution of 6400(H) x 1200(V) 5.5 frames per second across all four sensors.
- The cameras maximum frame rate shall be 22 frames per second across all four sensors at the maximum resolution of 1600(H) x 1200(V) per sensor.
- The cameras maximum frame rate shall be 88 frames per second across all four sensors at the maximum resolution of 800(H) x 600(V) per sensor.
- The camera shall support a minimum illumination of 0.2 Lux @ F2.0 in day mode and 0 Lux @ F2.0 in night mode.
- The cameras overall imaging shall provide a 180 degree field of view.
- The camera shall have a 2-axis easily adjustable gimbal with 360° pan 90° tilt for easy and accurate positioning.

Ethernet Switch:

- The switch shall have no less than four 10/100 Base-T ports
- Each port will be auto sensing MDI or MDI-X
- Each port will have LEDs to show link status, transmission speed and PoE supply
- The switch shall have no less than four high power 802.3af ports capable of supplying 25W each
- The switch shall have an operating range from -40C to 75C
- Each PoE link will be protected by an external surge protector

Required Equipment and Services (No Substitutes):

Below is a minimum list of required equipment. Vendor is required to ensure compatibility with the existing equipment and provide all parts and labor required to provide a "turn-key" working system.

QTY	Item	Description
1	AV5155DNH	5Mp Dome Camera
1	AV8185DNH	8Mp Dome Camera, 180 degree view
2	SVWMT	Wall mount
2	MDPMA	Wall to Pole Mount Adaptor
1	BW-BW121G	Outdoor enclosure
1	EIRHP305-T	Hardened Ethernet switch, extreme temp
1	MDR-100-48	48V supply for switch
2	PTP100	Canopy link
4	301561	PoE Protector
1	PTP100-power	Power injector for PTP-100
2	SMMB1A	Mounting bracket for PTP-100

Impound Lot IP Camera System

Bid Submittal

Vendor Name _____

Street _____

City, State and Zip _____

Phone _____ Email _____

Signature (company official) _____

Total System Cost _____

Vendor Requirements

- Three public safety references. Yes ___ No ___
- R56 certified installers who will install to R56 specifications. Yes ___ No ___
- Provide Name and ETA Certificate Number _____
- Authorized to sell Exacq and Arecont equipment. Yes ___ No ___
- Letter from manufacturer or distributor affirming authorization to sell Exacq and Arecont equipment. Yes ___ No ___
- Able to integrate with the existing Exacq and Arecont DVR system. Yes ___ No ___
- Provide 24x7 on call support with technician and engineer familiar with Exacq and Arecont system. Yes ___ No ___
- Complies with all specifications. Yes ___ No ___

If no is checked for any requirement please supply detailed information with exceptions, and reasons for not complying.