



Request for Proposal

Avigilon Alta Security video surveillance system

This Request for Proposal is confidential and shall not be disclosed to any other party without the consent of the Warren-Newport Public Library.

Friday, April 12, 2024

To whom it may concern:

You are invited to provide a proposal for the project detailed in this Request for Proposal (RFP) bid package. In order to be considered, we must receive your electronic submittal in our office no later than 12 p.m. on Monday, May 6.

We look forward to receipt of your proposal. Please send all responses to all emails outlined below.

- Ryan Livergood. Executive Director
rlivergood@wnpl.info

Sincerely,

Ryan Livergood
Executive Director

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Section I

Proposal Requirements

You are invited to submit a proposal for this RFP to the Warren-Newport Public Library. The intent of this bid package is to receive proposals prepared in accordance with this request and consistent with the scope of work detailed herein.

This request anticipates the receipt of proposals and negotiation of a contract with one contractor (herein referred to as “Contractor”) selected by the owner (herein after referred to as “Owner”). Proposals will be evaluated, in part, based on the proposed pricing and other criteria, i.e., service and support, schedule, and warranty. Any innovative ideas and suggestions outside the scope of services will be welcomed.

Submit your Company’s proposal by email no later than 12:00pm CST on **May 6, 2024**

RFP Schedule & Important Dates

- RFP Released to bidders: **Monday, April 15**
- Pre-Bid site visit: **Monday, April 22, 11am CST** (Please confirm attendance)
- Bidder clarifications and inquiries due: **Monday, April 29**
- RFP Due: **Monday, May 6**
- Award Date: **Tuesday, May 7**
- Anticipated project completion: **Friday, June 14**

A. Inquiries regarding this Request for Proposal:

All inquiries must be in writing. Such written inquiries will be sent to the above email address. Response to such inquiries will be in writing. No inquiries will be accepted after **12:00 pm CST, Monday, April 29**. If pertinent to all bidders, inquiry responses will be distributed to all parties.

B. Pre-Bid Site Visit:

A pre-bid site visit is requested and is scheduled for **Monday, April 22 at 11am CST**. The pre-bid site visit starting point will be the main lobby. Parking will be available.

C. Closing / Bid Award Date:

Proposals must be received at the aforementioned email address on or before 12:00 p.m. CST on **Monday, May 6**. Owner, at its sole discretion, may choose not to consider any late proposals. Owner anticipates the bid to be awarded during the May 7 Special Board meeting in the evening on **Tuesday, May 7** with an initial project planning meeting with the Owner no later than **Friday, May 10**.

All bidders will be notified when a decision is reached. Detailed discussions regarding the implementation schedule will commence when the Contractor is selected.

D. Owner's Right:

Owner reserves the right to reject any and all proposals, in whole or in part, with or without cause, even if all stated requirements are met. Owner is not obligated to accept the lowest bid. Bidders agree their proposals will remain valid for a period of ninety (90) calendar days following the closing.

Section II

Proposal Evaluation Criteria

- **Cost:** Weight: 60%
 - What are the total costs for the project?
- **Service and support:** Weight: 30%
 - What is the proximity of the Contractor to the Owner's location?
 - Can the Contractor provide local references for similar jobs they have done for public libraries or other local government units?
- **Schedule:** Weight: 10%
 - What is the proposed timeline for the project?
 - How will the Contractor minimize disruption to library operations?

Section III

Scope of Work, Equipment, and Project Details

We require a video surveillance system which is cloud based, easy to install, deploy, maintain, and use. The system needs to be secure, scalable, reliable, user friendly and flexible to accommodate future operational and technological changes. The system needs to provide robust authentication, authorization and reporting capabilities. It needs to be cost effective and work with our current internet bandwidth without drastically affecting our other functions. We have selected Avigilon Alta Security, as this system fits our criteria.

1.0 IP VIDEO SURVEILLANCE SYSTEM

Objective: to provide, install and support a complete IP video surveillance solution. Warren-Newport Public Library District has chosen Avigilon Alta Security, a Motorola Solutions company, for its video surveillance system upgrade. No substitutions will be accepted.

1.1 SCOPE OF WORK

Provide and install video management software, network cameras, camera licenses and subscriptions, cloud appliance(s) and workstation(s) by Avigilon Alta Security, a Motorola Solutions company. The Bidder will be responsible for system design, structured cabling, installation, maintenance, service, support and training.

1.2 SUBMITTALS

A. Informational Submittals

1. Product Data
 - a. Manufacturer's printed or electronic data sheets.
 - b. Manufacturer's installation guides and operation manuals.
 - c. Warranty documentation.
2. Shop Drawings

B. Closeout Submittals

1. Final listing of devices and settings.
2. System test results.
3. Statement of compliance with Manufacturer Cyber Hardening Guidelines.

1.3 QUALIFICATIONS

A. Installers shall be certified, trained and authorized by the Manufacturer to install, integrate, test and commission the system.

1.4 WARRANTY

A. Manufacturer shall provide a limited 10-year warranty for the product to be free of defects in material and workmanship as long as the subscription is in place. 3yr renewable pre-paid subscription to be included.

1.5 TRAINING

A. Successful integrator shall provide 4 hours of user training and 4 hours of administrator training.

2.0 VIDEO MANAGEMENT SYSTEM/SOFTWARE (VMS)

2.1 ALTA AWARE CLOUD

A. Basis of Design: The Video Management System/Software (VMS) shall be Alta Aware Cloud VMS by Avigilon Alta Security, a Motorola Solutions company. No substitutions will be accepted. The VMS will include integrated machine learning capabilities accessible in the cloud or on-premises

2.2 ANALYTICS

- A. The VMS shall analyze video feeds from all connected cameras to identify objects and events, based on predetermined rules and unusual activity detection, and it shall send instant notification and alarms as a result of this identification via email.
- B. The VMS shall enable people counting, vehicle counting, intrusion detection, and forensic investigation.
- C. The VMS shall employ AI to self-learn, enabling progressively more accurate analytic results over time.
- D. The VMS shall include the option to add license plate recognition (LPR) functionality to individual or system wide Ava Dome and/or Ava Bullet cameras to provide the user with rules-based alerts, post-event investigation information and optimized search parameters.

2.3 VIDEO SPECIFICATIONS

- A. Compression types supported: H.265, H.264, MJPEG, JPEG2000
- B. The VMS shall support IP cameras and encoders from third party manufacturers in addition to their own products. Consult AVA Security for a current list of supported third party devices.
- C. The VMS shall discover IP cameras and encoders automatically.
- D. Camera capacity: cameras per server will depend on the server model selected, compression, resolution, and frame rate.
 - 1. Per server: 16-200
 - 2. Per site: unlimited
- E. The VMS shall provide dynamic stream selection.

2.4 FORENSICS

- A. The VMS shall facilitate forensic or other investigation by provisioning the following search functions:
 - 1. Similarity.
 - 2. Physical characteristics.
 - 3. Event.
 - 4. Individual image.

5. Timeline with embedded thumbnail images.
6. All video.

2.5 SECURITY

A. Cloud

1. Cloud connectivity shall only be possible through HTTPS (port 443).
2. All connections to the cloud shall be outbound and require no ports to be opened for inbound communication to support the VMS application.
3. Each cloud deployment shall be a fully independent instance, fully isolated and protected from other deployments.
4. Users shall have full control over the system maintenance window.

B. Streaming

1. Video streaming shall be controlled via RTSP operating over TLS.
2. SRTP shall be used to provide encryption, message authentication and integrity of the streaming video.
3. The cloud system shall be architected so that latency and bandwidth consumption are minimized, as is the involvement of the Manufacturer-operated cloud.

C. Encryption

1. Video shall be encrypted using AES.
2. All recordings and metadata shall be encrypted at rest in both the cloud and the camera.

D. Tampering detection shall be provided through the digital watermarking of video.

3.0 SECURITY APPLIANCES

3.1 ALTA CLOUD CONNECTOR

A. Basis of Design: The security appliance (appliance) shall be the Alta Cloud Connector workstation/appliance by Avigilon Alta Security, a Motorola Solutions company. No substitutions will be accepted. The appliance shall be a standalone or rack mount device with internal Graphics Processing Unit (GPU), able to support the management and storage of multiple video surveillance cameras via network connectivity.

B. The appliance shall meet or exceed the following primary characteristics:

1. Embedded Nvidia GeForce GPU.
2. Installed AVA Aware Video Management System (VMS).
3. Embedded Linux kernel for the operating system.
4. Embedded machine learning-based video analytics.

5. Dual Gb Base-T (Gigabit Ethernet) network ports.
6. Pre-loaded security certificates.
7. Third-party connectivity through ONVIF protocols.
8. Standard support.
9. 3-year warranty.
10. Power cables to be included.

C. Additional Specifications:

1. Number of cameras supported:
 - a. Model A500: up to 25
 - b. Model A750: up to 50
 - c. Model A1000: up to 75
 - d. Model A2000: up to 100
 - e. Model A3000: up to 200
2. SATA storage configuration:
 - a. Model A500: 3 hard disks.
 - b. Model A750: 3 hard disks.
 - c. Model A1000: 4 hard disks.
 - d. Model A2000: 12 hard disks.
 - e. Model A3000: 12 hard disks.
3. Maximum SATA storage capacity (raw, net):
 - a. Model A500: up to 24TB, 16TB
 - b. Model A750: up to 48TB, 32TB
 - c. Model A1000: up to 64TB, 48TB
 - d. Model A2000: up to 192TB, 160TB
 - e. Model A3000: up to 192TB, 160TB
4. Nvidia GPU:
 - a. Model A500: GeForce
 - b. Model A750: GeForce
 - c. Model A1000: Quadro RTX 4000
 - d. Model A2000: Quadro RTX 4000
 - e. Model A3000: 2 x Quadro RTX 4000
5. Network interface: the appliance shall have options for network connectivity ranging from two or more 1 Gb Base-T ports to two 10 Gb Base-T or SFP+ ports.
 - a. Model A500: 2 x 1 Gb Base-T
 - b. Model A750: 2 x 1 Gb Base-T
 - c. Model A1000: 2 x 1 Gb Base-T, with option for 1 Gb Base-T + 2 x 10 Gb Base-T
 - d. Model A2000: 2 x 1 Gb Base-T + 2 x 10 Gb Base-T, with option for 2 x 1 Gb Base-T + 2 x 10 Gb SFP+
 - e. Model A3000: 2 x 1 Gb Base-T + 2 x 10 Gb Base-T, with option for 4 x 1 Gb Base-T + 2 x 10 Gb SFP+
6. Physical mounting:

- a. Model A500: standalone.
- b. Model A750: standalone.
- c. Model A1000: standalone, with rack mount kit option.
- d. Model A2000: 2 RU rackmount.
- e. Model A3000: 2 RU rackmount.

4.0 SMART SECURITY CAMERAS

4.1 ALTA DOME

- A. Basis of Design: The network dome camera (dome camera) shall be the Alta Dome camera by Avigilon Alta Security, a Motorola Solutions company. No substitutions will be accepted. The camera will be an indoor/outdoor network dome camera with up to 8 MP (4K) image resolution, equipped with Artificial Intelligence (AI) and audio analytics, and with the option for built-in retention for cloud operation.
- B. The dome camera shall possess the following primary characteristics:
 - 1. H.264 and MJPEG compression.
 - 2. Resolution up to 3840 x 2160 pixels.
 - 3. Frame rate up to 30 fps.
 - 4. A 4-microphone audio array with AI event classification and source localization.
 - 5. Day/night operation with 850 nm IR LED.
 - 6. Power: POE+ IEEE 802.3at, Type 2.
 - 7. Capable of edge storage and cloud management with or without an off-site appliance.
 - 8. Optional per-camera license available for license plate recognition (LPR) analytic functionality.
- C. Additional Video Camera Specifications
 - 1. Imaging Device:
 - a. Size: 1/1.8 inch
 - b. Resolution: 5 MP
 - 2. Lens:
 - a. Built-in, varifocal, motorized
 - b. Aperture: f/1.5 – f/2.8
 - c. Focal Length: 3.6 - 10 mm
 - d. Field of view:
 - i. Horizontal: 100°– 45°
 - ii. Vertical: 53°– 25°
 - e. Remote zoom and focus
 - f. P-iris
 - 3. Video:

- a. Compression type: H.264, MJPEG
 - b. Maximum resolution:
 - i. 8 MP (4K): 3840 x 2160
 - ii. 5 MP: 3072 x 1728
 - c. Frame rate: up to 30 fps
 - d. Dynamic range: multi-exposure line-based HDR
 - e. The camera shall provide AI-based video analytics to include people and vehicle presence.
4. Local SD storage
- a. Micro SD, SDXC UHS-1 card.
 - b. Up to 120 days storage with cloud operation.

D. Network

- 1. Connectivity: 10/100/1000 BASE-TX Ethernet.
- 2. Protocols supported:
 - a. Transmission Control Protocol (TCP), Internet Protocol (IP) v4, User Datagram Protocol (UDP).
 - b. Configuration: Dynamic Host Configuration Protocol (DHCP).
 - c. Web services: Internet Control Message Protocol (ICMP), Secure Hypertext Transfer Protocol (HTTPS).
 - d. Network services: Address Resolution Protocol (ARP), Domain Name System (DNS), DNS Service Discovery (DNS-SD), Multicast DNS (mDNS), Network Time Protocol (NTP).
 - e. Media: Real-Time Control Protocol (RTCP), Real-Time Transport Protocol (RTP), Real-Time Streaming Protocol (RTSP).
 - f. Security: Transport Layer Security (TLS).
- 3. Security
 - a. The dome camera shall have factory-installed certificates, backed by a Trusted Platform Module, and unique encryption keys.
 - b. The dome camera shall have no default passwords.
 - c. Access authentication shall be mandatory.
 - d. Encryption: via HTTPS and TLS.
- 4. Cloud
 - a. All upgrades shall be automatically managed from the cloud.

E. Electrical

- 1. Power Input:
 - a. IEEE 802.at PoE+, Type 2
- 2. Power Consumption:
 - a. Without heater: 12.95 W
 - b. With heater: 23 W

F. Mechanical and Environmental

- 1. Construction material: Aluminum; thermo-plastic bubble.
- 2. Finish options: white, black.

3. Impact resistance: IK10.
4. Dimensions (D x H): 152 mm (6.0 in) x 96 mm (3.8 in).
5. Temperature:
 - a. Operating: -25°C to 50°C (-45°F to 90°F).
 - b. Storage: -40°C to 60°C (-40°F to 108°F).
6. Ingress protection: IP66.
7. Mounting box options: Octagon, 4" square, single or double gang, EU ceiling or outlet.

4.2 ALTA COMPACT DOME

- A. Basis of Design: The compact network dome camera (compact dome) shall be the Alta Compact Dome camera by Avigilon Alta Security, a Motorola Solutions company. No substitutions will be accepted. The camera will be a compact indoor dome camera with 5MP image resolution, equipped with Artificial Intelligence (AI) and audio analytics, and with the option for built-in retention for cloud operation.
- B. The dome camera shall possess the following primary characteristics:
 1. H.265, H.264, and MJPEG compression.
 2. Resolution up to 3840 x 2160 pixels.
 3. Frame rate up to 30 fps.
 4. Microphone with AI event classification and source localization.
 5. Day/night operation with 850 nm IR LED.
 6. Power: POE+ IEEE 802.3af
 7. Capable of edge storage and cloud management with or without an off-site appliance.
 8. Optional per-camera license available for license plate recognition (LPR) analytic functionality.
- C. Additional Video Camera Specifications
 1. Imaging Device:
 - a. Size: 1/2.7 inch
 - b. Resolution: 5 MP
 2. Lens:
 - a. Fixed focus
 - b. Aperture: f/1.3
 - c. Focal Length: 3.2 mm
 - d. Field of view:
 - i. Horizontal: 102°
 - ii. Vertical: 71°
 - e. Night mode
 - i. IR cut filter
 - ii. Automatic operation
 - iii. 850 nm IR LED

3. Video:
 - a. Compression type: H.265, H.264, MJPEG
 - b. Maximum resolution:
 - i. 5 MP: 2688 x 1944
 - c. Frame rate: up to 30 fps
 - d. Dynamic range: multi-exposure line-based HDR.
 - e. The camera shall provide AI-based video analytics to include people and vehicle presence.
4. Local SD storage
 - a. 2 x Micro SD, SDXC UHS-1 card.
 - b. Up to 120 days storage with cloud operation.

D. Network

1. Connectivity: 10/100/1000 BASE-TX Ethernet
2. Protocols supported:
 - a. Transmission Control Protocol (TCP), Internet Protocol (IP) v4, User Datagram Protocol (UDP).
 - b. Configuration: Dynamic Host Configuration Protocol (DHCP).
 - c. Web services: Internet Control Message Protocol (ICMP), Secure Hypertext Transfer Protocol (HTTPS).
 - d. Network services: Address Resolution Protocol (ARP), Domain Name System (DNS), DNS Service Discovery (DNS-SD), Multicast DNS (mDNS), Network Time Protocol (NTP).
 - e. Media: Real-Time Control Protocol (RTCP), Real-Time Transport Protocol (RTP), Real-Time Streaming Protocol (RTSP).
 - f. Security: Transport Layer Security (TLS).
3. Security
 - a. The compact dome camera shall have factory-installed certificates, backed by a Trusted Platform Module, and unique encryption keys.
 - b. The compact dome camera shall have no default passwords.
 - c. Access authentication shall be mandatory.
 - d. Encryption: via HTTPS and TLS.
4. Cloud
 - a. All upgrades shall be automatically managed from the cloud.

E. Electrical

1. Power Input:
 - a. IEEE 802.af PoE

F. Mechanical and Environmental

1. Construction material: Aluminum; thermo-plastic bubble.
2. Finish options: white, black.
3. Dimensions (D x H): 107.4 mm (4.2 in) x 64.3 mm (2.5 in).
4. Temperature:
 - a. Operating: 0°C to 40°C (32°F to 104°F).

b. Storage: -40°C to 60°C (-40°F to 108°F).

4.3 ALTA 360

- A. Basis of Design: The 360-degree fisheye panoramic camera (fisheye camera) shall be the Alta 360 camera by Avigilon Alta Security, a Motorola Solutions company. No substitutions will be accepted. The camera will be an indoor/outdoor dome camera with up to 9 MP effective image resolution, equipped with Artificial Intelligence (AI) and audio analytics, and with the option for built-in retention for cloud operation.
- B. The fisheye camera shall possess the following primary characteristics:
1. H.264, and MJPEG compression.
 2. Resolution up to 3008 x 3008 pixels.
 3. Frame rate up to 30 fps.
 4. A 4-microphone audio array with AI event classification and source localization.
 5. Day/night operation with 850 nm IR LED.
 6. Power: POE+ IEEE 802.3at, Type 2.
 7. Capable of edge storage and cloud management with or without an off-site appliance.
- C. Additional Video Camera Specifications
1. Imaging Device:
 - a. Size: 1/2.3 inch
 - b. Resolution: 12 MP, 9 MP effective
 2. Lens:
 - a. Fixed focus
 - b. f/2.0
 - c. Focal Length: 0.5 m - infinite
 - d. Field of view: >180°
 3. Video:
 - a. Compression type: H.265, H.264; and MJPEG
 - b. Resolution: up to 3008 x 3008 pixels
 - c. Frame rate: up to 30 fps
 - d. Dynamic range: multi-exposure line-based HDR
 - e. The fisheye camera shall provide AI-based video analytics to include people and vehicle presence.
- D. Network
1. Connectivity: 10/100/1000 BASE-TX Ethernet
 2. Protocols supported:
 - a. Transmission Control Protocol (TCP), Internet Protocol (IP) v4, User Datagram Protocol (UDP).
 - b. Configuration: Dynamic Host Configuration Protocol (DHCP).
 - c. Web services: Internet Control Message Protocol (ICMP), Secure

- Hypertext Transfer Protocol (HTTPS).
 - d. Network services: Address Resolution Protocol (ARP), Domain Name System (DNS), DNS Service Discovery (DNS-SD), Multicast DNS (mDNS), Network Time Protocol (NTP).
 - e. Media: Real-Time Control Protocol (RTCP), Real-Time Transport Protocol (RTP), Real-Time Streaming Protocol (RTSP).
 - f. Security: Transport Layer Security (TLS).
 - 3. Security
 - a. The fisheye camera shall have factory-installed certificates, backed by a Trusted Platform Module, and unique encryption keys.
 - b. The fisheye camera shall have no default passwords.
 - c. Access authentication shall be mandatory.
 - d. Encryption: via HTTPS and TLS.
 - 4. Cloud
 - a. The fisheye camera shall be capable of cloud connection via QR code scan.
 - b. All upgrades shall be automatically managed from the cloud.
- E. Electrical
- 1. Power Input:
 - a. IEEE 802.at PoE+ Type 2
 - 2. Power Consumption
 - a. Without heater: 12.95 W
 - b. With heater: 23 W
- F. Mechanical and Environmental
- 1. Construction material: Aluminum; thermo-plastic bubble.
 - 2. Finish options: white, black.
 - 3. Impact resistance: IK10.
 - 4. Dimensions (D x H): 152 mm (6.0 in) x 77 mm (3.0 in).
 - 5. Temperature:
 - a. Operating: -25°C to 50°C (-45°F to 90°F).
 - b. Storage: -40°C to 60°C (-40°F to 108°F).
 - 6. Ingress protection: IP66.
 - 7. Mounting box options: Octagon, 4” square, single or double gang, EU ceiling or outlet.

4.4 ALTA BULLET

- A. Basis of Design: The network bullet camera (bullet camera) shall be the Alta Bullet camera by Avigilon Alta Security, a Motorola Solutions company. No substitutions will be accepted. The camera will be an outdoor bullet camera with up to 8 MP (4K) image resolution, equipped with Artificial Intelligence (AI) and audio analytics, and options for wide angle or telephoto lenses.
- B. The bullet camera shall possess the following primary characteristics:

1. H.265, H.264 and MJPEG compression.
2. Resolution up to 3840 x 2160 pixels.
3. Frame rate up to 30 fps.
4. A 4-microphone audio array with AI event classification and source localization.
5. Day/night operation with 850 nm IR LED and IR cut filter..
6. Power: POE+ IEEE 802.3at, Type 2, and POE IEEE 802.3af.
7. Optional per-camera license available for license plate recognition (LPR) analytic functionality.

C. Additional Video Camera Specifications

1. Imaging Device:
 - a. Size: 1/1.8 inch
 - b. Resolution: 5 MP and 8 MP (4K).
2. Lens options:
 - a. Wide angle
 - i. Aperture: f/1.38 - f/2.8
 - ii. Focal Length: 4.3 - 10.8 mm
 - iii. Field of view: Horizontal 100° - 40°; Vertical 53° - 23°
 - b. Telephoto
 - i. Aperture: f/1.47 - f/1.69
 - ii. Focal length: 11 - 28 mm
 - iii. Field of view: Horizontal 39° - 16°; Vertical 23° - 9°
3. Video:
 - a. Compression type: H.265, H.264 and MJPEG
 - b. Resolution:
 - i. 5 MP: 3072 x 1728
 - ii. 8 MP (4K): 3840 x 2160
 - c. Frame rate: up to 30 fps
 - d. Dynamic range: multi-exposure line-based HDR.
 - e. The camera shall provide AI-based video analytics to include people and vehicle presence.
4. Local SD storage
 - a. Micro SD, SDXC UHS-1 card.
 - b. Up to 120 days of storage with cloud operation.

D. Network

1. Connectivity: 10/100/1000 BASE-TX Ethernet
2. Protocols supported:
 - a. Transmission Control Protocol (TCP), Internet Protocol (IP) v4, User Datagram Protocol (UDP).
 - b. Configuration: Dynamic Host Configuration Protocol (DHCP).
 - c. Web services: Internet Control Message Protocol (ICMP), Secure Hypertext Transfer Protocol (HTTPS).
 - d. Network services: Address Resolution Protocol (ARP), Domain Name

- System (DNS), DNS Service Discovery (DNS-SD), Multicast DNS (mDNS), Network Time Protocol (NTP).
- e. Media: Real-Time Control Protocol (RTCP), Real-Time Transport Protocol (RTP), Real-Time Streaming Protocol (RTSP).
- f. Security: Transport Layer Security (TLS).
- 3. Security
 - a. The bullet camera shall have factory-installed certificates, backed by a Trusted Platform Module, and unique encryption keys.
 - b. The bullet camera shall have no default passwords.
 - c. Access authentication shall be mandatory.
 - d. Encryption: via HTTPS and TLS.
- 4. Cloud
 - a. All upgrades shall be automatically managed from the cloud.
- E. Electrical
 - 1. Power Input:
 - a. IEEE 802.3af PoE+ Type 2
 - b. IEEE 802.3af without heater or IR
 - 2. Power Consumption
 - a. Without heater: 12.95 W
 - b. With heater: 23 W
- F. Mechanical and Environmental
 - 1. Construction material: Aluminum
 - 2. Finish options: white, black.
 - 3. Impact resistance: IK10.
 - 4. Dimensions (D x H):
 - a. Overall length: 292 mm (11.5 in).
 - b. Mount diameter: 114 mm (4.5 in).
 - c. Camera:
 - i. Length: 199 mm (7.85 in).
 - ii. Housing diameter: 86 mm (3.4 in).
 - 5. Temperature:
 - a. Operating: -25°C to 50°C (-45°F to 90°F).
 - b. Storage: -40°C to 60°C (-40°F to 108°F).
 - 6. Ingress protection: IP67.

4.5 ALTA QUAD

- A. Basis of Design: The network quad camera (quad camera) shall be the Alta Quad camera by Avigilon Alta Security, a Motorola Solutions company. No substitutions will be accepted. The camera will be a multisensor IP camera with four (4) 5 MP sensors, equipped with Artificial Intelligence (AI) and audio analytics, and options for wide angle or telephoto lenses.
- B. The quad camera shall possess the following primary characteristics:

1. Four (4) 5 MP image sensors.
2. H.265, H.264 and MJPEG compression.
3. Resolution up to 2592 x 1944 pixels at 30 fps per sensor.
4. AI event classification and audio analytics.
3. Day/night operation with 850 nm IR LED and IR cut filter..
6. Power: POE+ IEEE 802.3at, Class 4 power.

C. Additional Video Camera Specifications

1. Imaging Device:
 - a. Size: 1/2.7 inch
 - b. Resolution: 4 x 5 MP.
2. Lens:
 - a. Type: motorized
 - b. Aperture: f/1.9 - f/2.9
 - c. Focal Length: 3.7 - 7.7 mm
 - d. Field of view: Horizontal 100° - 40°; Vertical 53° - 23°; Diagonal: 100°-48°
3. Video:
 - a. Compression type: H.265, H.264 and MJPEG
 - b. Resolution: 5 MP per sensor.
 - c. Frame rate: up to 30 fps.
 - d. Dynamic range: multi-exposure line-based HDR.
 - e. The camera shall provide AI-based video analytics to include people and vehicle presence.
4. Local SD storage
 - a. 2 x Micro SD, SDHC, SDXC.

D. Network

1. Connectivity: IEEE 802.3ab 10/100/1000 BASE-TX Ethernet
2. Protocols supported:
 - a. Transmission Control Protocol (TCP), Internet Protocol (IP) v4, User Datagram Protocol (UDP).
 - b. Configuration: Dynamic Host Configuration Protocol (DHCP).
 - c. Web services: Internet Control Message Protocol (ICMP), Secure Hypertext Transfer Protocol (HTTPS).
 - d. Network services: Address Resolution Protocol (ARP), Domain Name System (DNS), DNS Service Discovery (DNS-SD), Multicast DNS (mDNS), Network Time Protocol (NTP).
 - e. Media: Real-Time Control Protocol (RTCP), Real-Time Transport Protocol (RTP), Real-Time Streaming Protocol (RTSP).
 - f. Security: Transport Layer Security (TLS).
3. Security
 - a. The quad camera shall have factory-installed certificates, backed by a Trusted Platform Module, and unique encryption keys.
 - b. The quad camera shall have no default passwords.

- c. Access authentication shall be mandatory.
- d. Encryption: via HTTPS and TLS.

E. Electrical

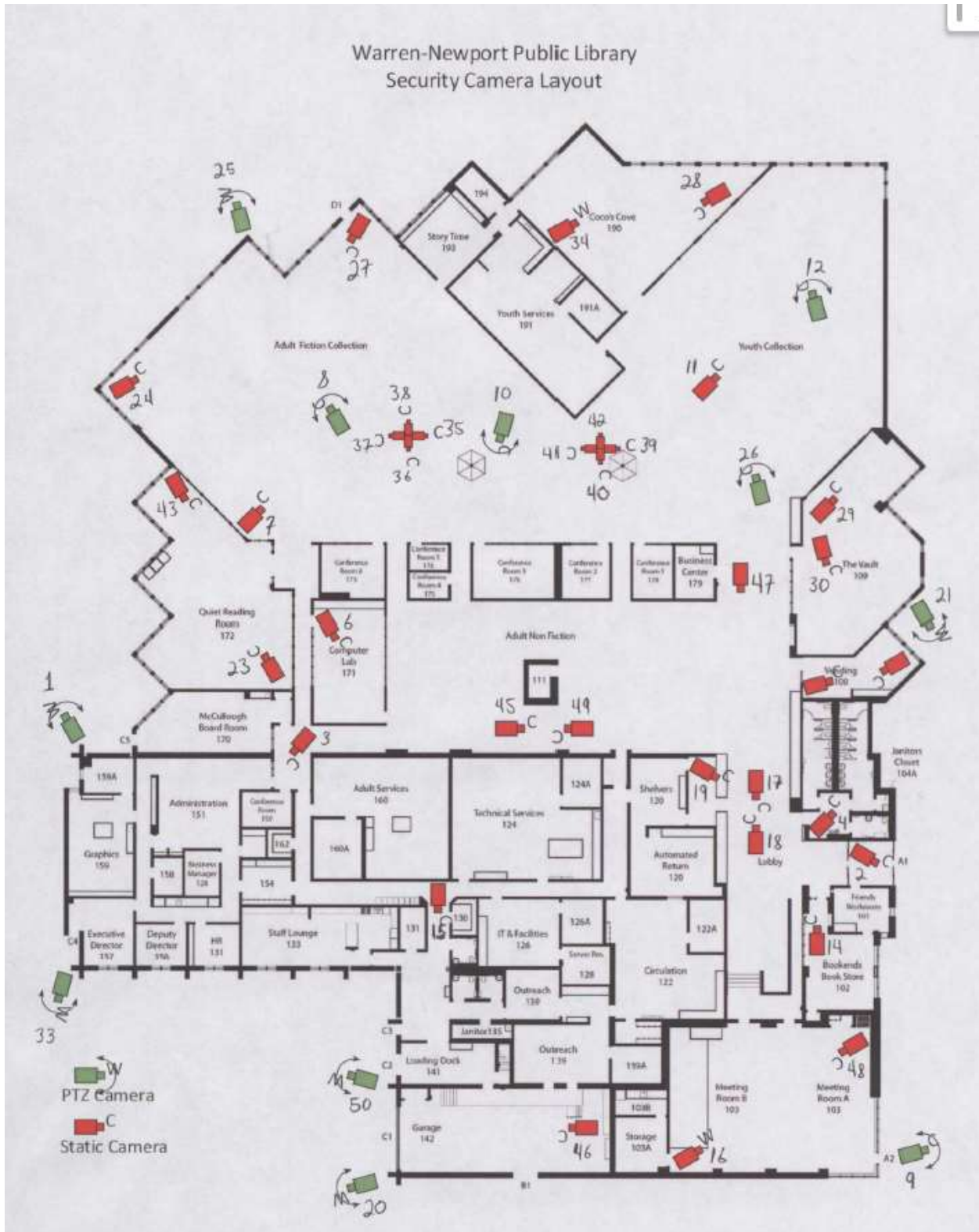
- 1. Power Input:
 - a. IEEE 802.at PoE+ Type 2
 - b. IEEE 802.3af without heater or IR
- 2. Power Consumption
 - a. Without heater: 13.84 W
 - b. With heater: 25.5 W

F. Mechanical and Environmental

- 1. Construction material: Aluminum
- 2. Impact resistance: IK10.
- 3. Dimensions (D x H):
 - a. Main body: 267 mm (10.5 in) x 114 mm (4.5 in).
 - b. With bracket: 275 mm (10.8 in) x 118 mm (4.6 in).
- 4. Weight: 2.7 kg (5.95 lbs).
- 5. Temperature:
 - a. Operating: -40°C to 60°C (-40°F to 108°F).
 - b. Storage: -40°C to 60°C (-40°F to 108°F).
- 6. Ingress protection: IP66.

Request for Proposal

WNPL – Avigilon Alta Security video surveillance system



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WNPL – Avigilon Alta Security video surveillance system

	A	B	C	D	F	G	L	M
1	Camera #	Location	Current Camera	Current Make	Current Model	Indoor or Outdoor	Notes	Analog or Digital
2	1	Blackstone Street PTZ	Pelco Spectra-PTZ	Axis	AxisQ7404/Q7414	Outdoor		Analog
3	2	Main Front Entrance	Fixed Camera	Axis	AxisQ7404/Q7414	Indoor		Analog
4	3	Board Room Hallway	Fixed Camera	Axis	AxisQ7404/Q7414	Indoor	remove, New inside Boardroom camera	Analog
5	4	Public Restrooms	Fixed Camera	Axis	AxisQ7404/Q7414	Indoor		Analog
6	6	The Flex	Fixed Camera	Axis	AxisQ7404/Q7414	Indoor		Analog
7	7	Adult Internet Row	Fixed Camera	Axis	AxisQ7404/Q7414	Indoor	Not Working	Analog
8	8	Adult PTZ Rt Desk	PTZ	Axis	AxisQ7404/Q7414	Indoor		Analog
9	9	SouthWest PTZ	Pelco Spectra-PTZ	Axis	AxisQ6055	Outdoor		
10	10	Adult PTZ CD Collection	PTZ	Axis	AxisQ7404/Q7414	Indoor		Analog
11	11	Youth Internet Row	Fixed Camera	Axis	AxisQ7404/Q7414	Indoor		Analog
12	12	Youth PTZ Area	Pelco Spectra-PTZ	Honeywell	HDZ	Indoor	Not Working	
13	14	Bookends Store	Fixed Camera	Honeywell	HD3MDIH	Indoor		
14	15	Staff Entrance Restrooms	Fixed Camera	Honeywell	HD3MDIH	Indoor		
15	16	Meeting Room B	Fixed Camera	Honeywell	HD3MDIH	Indoor		
16	17	Main Hallway Meeting Rooms	Fixed Camera	Honeywell	HD3MDIH	Indoor		
17	18	Main Hallway Non Fiction	Fixed Camera	Honeywell	HD3MDIH	Indoor		
18	19	Circ Desk	Fixed Camera	Honeywell	HD3MDIH	Indoor		
19	20	Garage NW Corner PTZ	Pelco Spectra-PTZ	Honeywell	ACUK IP	Outdoor	Not Working	
20	21	South Parking PTZ	Pelco Spectra-PTZ	Honeywell	HD2302DE	Outdoor		
21	23	QRR Fireplace	Fixed Camera	Honeywell	HD3MDIH	Indoor		
22	24	Adult Fiction North Area	Fixed Camera	Honeywell	HD3MDIH	Indoor		
23	25	Oplaine Street PTZ	Pelco Spectra-PTZ	Honeywell	HD2302DE	Outdoor		
24	26	Main PTZ Hallway Far East	PTZ	Axis	AxisQ6045	Indoor		
25	27	Adult Fiction Exit	Fixed Camera	Honeywell	HD3MDIH	Indoor		
26	28	Youth CoCos Cove Entrance	Fixed Camera	Honeywell	HD3MDIH	Indoor		
27	29	Vault Collection	Fixed Camera	Honeywell	HD3MDIH	Indoor		
28	30	Vault Gaming	Fixed Camera	Honeywell	HD3MDIH	Indoor		
29	31	Vending Area	Fixed Camera	Honeywell	HD3MDIH	Indoor		
30	33	NorthWest Lot PTZ	Pelco Spectra-PTZ	Honeywell	HD2302DE	Outdoor		
31	34	Youth CoCos Activity Area	Fixed Camera	Axis	AxisP3354	Indoor		
32	35	Adult CD's	Fixed Camera	Axis	AxisP3707-PE	Indoor		
33	36	Study Rooms 4-5	Fixed Camera	Axis	AxisP3707-PE	Indoor		
34	37	Adult Fiction	Fixed Camera	Axis	AxisP3707-PE	Indoor		
35	38	Adult DVD Collection	Fixed Camera	Axis	AxisP3707-PE	Indoor		
36	39	Living Room	Fixed Camera	Axis	AxisP3707-PE	Indoor		
37	40	Study Rooms 1-3	Fixed Camera	Axis	AxisP3707-PE	Indoor		
38	41	Adult Full North View	Fixed Camera	Axis	AxisP3707-PE	Indoor		
39	42	Youth Ref Desk	Fixed Camera	Axis	AxisP3707-PE	Indoor		
40	43	QRR Majt Mile	Fixed Camera	Axis	AxisP3354	Indoor		
41	44	Vending Room Windows	Fixed Camera	Axis	AxisP3354	Indoor		

	A	B	C	D	F	G	L	M
42	45	Adult Non-Fiction Self-Checks	Fixed Camera	Axis	AxisP3354	Indoor		
43	46	Inside Garage	Fixed Camera	Axis	AxisP3354	Indoor		
44	47	Main Business Center	Fixed Camera	Axis	AxisP3365-WVE	Indoor		
45	48	Meeting Room A	Fixed Camera	Axis	AxisP3354	Indoor		
46	49	Adult Non-Fiction Board Room	Fixed Camera	Axis	AxisP3354	Indoor		
47	32	Loading Dock PTZ	Pelco Spectra-PTZ	Honeywell	HD2302DE	Outdoor		
48	47	Inside Boardroom	Fixed camera			Indoor	Add	
49	48	Storytime room	Fixed camera			Indoor	Add	
50	49	Adult Non-fiction exist	Fixed camera			Indoor	Add	
51								
52		300 cameras		8				
53		Analog to IP		8				
54		New cabling		11				
55		Outdoor		7				