



## INVITATION TO BID

The City of Gatlinburg is accepting sealed bids for replacing the Security Camera System at the Gatlinburg Convention Center at 234 Historic Nature Trail, Gatlinburg, TN 37738.

Bids will be received at City Hall until **2:30 p.m. May 9th, 2019** at which time they will be publicly opened and read aloud. No bid may be withdrawn for thirty (30) days.

All bids must be submitted in a sealed envelope with the notation "**Bid on Security Camera System**" along with the bidders name and address and the bid opening time and date clearly printed on the front of the outside of the envelope.

For questions concerning the Bid Documents, Bidders may contact City of Gatlinburg, Delea Patterson, AP/Purchasing at 865-436-1409 or Fax 865-436-6464 or [deleap@gatlinburgtn.gov](mailto:deleap@gatlinburgtn.gov).

Questions about the specifications need to be directed to the Gatlinburg Convention Center, Scott Murphy at 865-430-1036.

Bid specifications will also be available on the City of Gatlinburg website at [www.gatlinburgtn.gov](http://www.gatlinburgtn.gov) under "Out for Bids" tab. This bid tab is located under Gatlinburg Government, and then choose Purchasing. Bid results are posted in the same area as shortly after bid opening as possible.

The City reserves the right to qualify bidders, to waive any informalities in bidding and to reject any and/or all bids and to accept the bid deemed most favorable to the interest of the City.

## GENERAL PROVISIONS

Prices quoted shall not include Federal or State taxes, if any are applicable. The successful bidder shall furnish tax exemption forms, if required, with their invoices.

The prices quoted are that for which the materials or services will be delivered F.O.B. Gatlinburg, Tennessee.

Any additions, deletions, or variations from the following specifications must be noted.

Inspection of the materials or equipment will be made by an agent of the City of Gatlinburg, and if found defective or fails in any way to meet the terms of this agreement, it will be rejected. Rejected materials or equipment will be replaced at the expense of the bidder.

All technical specifications must accompany bid.

The City of Gatlinburg reserves the right to purchase additional units or services under the same terms and conditions for a period of one (1) year, if applicable.

The City of Gatlinburg reserves the right to extend this agreement for two (2) additional year after the completion of the first year agreement, if applicable.

The City of Gatlinburg reserves the right to defer payment for thirty (30) days after delivery. The City of Gatlinburg also reserves the right to reject any and/or all bids.

The bidder agrees to indemnify the City of Gatlinburg from any and all liability, loss or damage the City may suffer as a result of claims, demands, costs, or judgments against it arising from any and all work under this agreement.

The bidder agrees to notify the City, in writing, within thirty (30) days, by registered mail, at the City's address as stated in this agreement, of any claim against the bidder on the obligations indemnified against.

It is the policy of the City of Gatlinburg not to discriminate on the basis of race, color, national origin, age, sex, or disability in its hiring and employment practices, or in admission to, access to, or operation of its programs, services and activities. With regard to all aspects of this contract, contractor certifies and warrants it will comply with this policy.

# SPECIFICATIONS FOR Security Camera System Replacement

Location: Gatlinburg Convention Center, 234 Historic Nature Trail  
Gatlinburg, TN 37738

Scope of work / project details;

The Gatlinburg Convention Center is replacing the existing security camera system. The current system is made up of 80 cameras, both indoor and outdoor, on 5 digital video recorders.

Goal: To update all existing cameras to HD specifications, add two cameras at two door locations, new category cabling, connectors, new BNC connectors and cabling where needed, and one software management tool using a single login to manage all cameras and record for 45 (forty-five) days.

Existing camera locations will be used and new cabling will need to be provided by vendor leading back to one central location for the Video Management System (VMS). Cabling will need to be replaced with Category 6 cable for new IP based cameras.

Door Cameras will need to be configured with existing phone system to ring into an extension.

Vendor is also responsible for video management system setup and training of City of Gatlinburg employees on system functionality, operation, and recording.

\*New system specs - must meet or exceed - Any deviations will need to be submitted with equipment specs and documentation for approval.

## **PART 1 GENERAL**

### **1.01 QUALIFICATIONS**

- A. Manufacturer shall have a minimum of five years' experience in producing IP video equipment.
- B. Installers shall be trained and authorized by the Manufacturer to install, integrate, test, and commission the system.
- C. Deviations from equipment specified below must meet or exceed all specifications.

### **1.02 DELIVERY, STORAGE AND HANDLING**

- A. Deliver the camera in the manufacturer's original, unopened, undamaged container with identification labels intact.

### **1.03 WARRANTY, LICENSING AND SUPPORT**

- A. Manufacturer shall provide a limited 3 year warranty for the product to be free of defects in material and workmanship.
- B. Manufacturer shall provide video analytics embedded in the camera free of license charges.

END OF SECTION

## **PART 2 CAMERAS and VMS**

### **2.01 Dome Camera**

- A. Manufacturer: Hanwha Techwin  
<https://www.hanwha-security.com/en/>
- B. Model SCO-6083R
- C. **QTY: 12**

### **2.02 Dome Camera**

- A. Manufacturer: Hanwha Techwin  
<https://www.hanwha-security.com/en/>
- B. Model HCV-7070R
- C. **QTY: 8**

### **2.03 Dome Camera**

- A. Manufacturer: Hanwha Techwin  
<https://www.hanwha-security.com/en/>
- B. Model SCV-6023R
- C. **QTY: 28**

### **2.04 Dome Camera**

- A. Manufacturer: Hanwha Techwin  
<https://www.hanwha-security.com/en/>
- B. Model XND-8080RV
- C. **QTY: 32**

### **2.05 Door Camera**

- A. Manufacturer: Axis
- B. Model A8015-E
- C. **QTY: 2**

### **2.06 Encoder**

- A. Manufacturer: Axis  
<https://www.axis.com>
- B. Model M7014
- C. **QTY: 12**

### **2.07 Network Switch**

- A. Manufacturer: Ubiquiti
- B. Model ES-16-150W
- C. **QTY: 6**

### **2.08 Network Switch**

- A. Manufacturer      Ubiquiti
- B. Model              ES-12F
- C. **QTY: 1**

**2.09 Network Switch**

- A. Manufacturer      Ubiquiti
- B. Model              ES-234-250W
- C. **QTY: 1**

**2.010 Door Entry Camera**

- A. Manufacturer      Axis  
<https://www.axis.com>
- B. Model              AXIS A8105-E
- C. **QTY: 2**

**2.011 SFP Type Multi Mode**

- A. Manufacturer – Ubiquity
- B. Model              UF-MM-1G
- C. **QTY: 4**

**2.012 SFP Type Single Mode**

- A. Manufacturer – Ubiquity
- B. Model              UF-SM-10-G
- C. **QTY: 6**

**2.013 Video Management System**

A. ***Product Set:* Milestone XProtect Professional + Base License, Milestone XProtect Professional + Device Licenses, Milestone XProtect Professional + Access Control System Licenses.**

B. ***Server:* Server will be provided by City of Gatlinburg.**

C. ***Description:*** Video surveillance management system (referred to as “system” or “VMS”) supporting an unrestricted number of users, devices, servers and sites, with options for central surveillance operations and mobile devices.

a. ***System Architecture:*** The VMS shall consist of:

1.) ***Servers:*** One or more VMS servers.

a.) Physical or virtualized Windows servers.

b.) Virtualized Windows servers, using:

i. Microsoft Hyper-V.

ii. VMWare.

- c.) UPS provided to physical servers, network infrastructure and devices such as cameras.
- 2.) *Server Software Components*: One or more software components by Manufacturer, or software components made by others as noted, per VMS server.
- a.) *Management Server*: Central service component of the VMS responsible for handling system configuration, distributing the configuration to other system components, such as recording server services, and for facilitating user authentication.
  - b.) *Recording Server*: Service responsible for communications, recording and event handling for all devices (cameras, video and audio encoders, I/O modules, metadata sources, etc.), including:
    - i. Retrieving video, audio, metadata and I/O event streams from devices.
    - ii. Recording video, audio and metadata.
    - iii. Providing access to live and recorded video, audio and metadata.
    - iv. Transmit live audio from operator's microphone to one or more camera speakers or supported IP speakers.
    - v. Providing access to device status.
    - vi. Triggering system and video events on device failures, events, etc.
    - vii. Writes video streams, audio streams and their metadata to a high-performance media database.
    - viii. Performing motion detection and generate smart search metadata.
  - c.) *Event Server*: Service that handles various tasks related to events, alarms, maps and third-party integrations via the Software Development Kit (SDK).
  - d.) *Log Server*: Service that writes all system, audit and rule-triggered log messages to database.
  - e.) *Service Channel*: Service responsible for communicating the following:
    - i. Service and configuration messages to full viewing client.
  - f.) *Mobile Server*: Service responsible for hosting the web client and for providing access to the VMS for web client and mobile client users.
  - g.) *ONVIF Out*: Optional server, plus 64-bit plug-in for management client. This is to enable private-to-public video integration.
  - h.) *DLNA Out*: Service to enable display of live video on any DLNA compliant TV or displays without the need for additional equipment.
  - i.) *Microsoft SQL Server*: Microsoft database server service for the management server, event server and log server services.
  - j.) *Microsoft Active Directory*: Active Directory is not required for single-site systems but is recommended for cyber security purposes.
- 3.) *PC or Laptop Workstations*: One or more PCs or laptops for client software applications intended to run on Windows-based PCs and laptops.

- a.) *Management Client*: The administration interface for all parts of the VMS, designed to be run remotely from, for example, an administrator's computer.
  - b.) *Full Viewing Client*: Designed for day-to-day use by dedicated operators, to be run remotely on the operator's computer. Full viewing client provides dedicated task-oriented tabs for Live Video, Video Playback, Sequence Explorer, plus dockable tabs for Alarm Monitor. Full viewing client supports definable keyboard and joystick button shortcuts for frequently-used actions, including window or camera selection.
  - c.) *Web Client*: Browser-based application for the occasional or remote user that needs easy access to live video monitoring and audio listening with PTZ control including use of presets, and video and audio playback and export, with defined exports available for later usage or download.
- 4.) *Tablets or Smartphones*: One or more tablets or smartphones using web client (see above) or mobile client.
- a.) *Mobile Client*: Native mobile app for smartphone or tablet users, for easy access to live and playback of cameras, and to activate system events and outputs. Additionally, for use as a remote recording device by using the mobile device's built-in camera, whereby video from the device's camera is streamed back to the VMS and recorded like a standard camera.
- 5.) *Networks*:
- a.) *Multiple Network Segments*: The VMS must support network segmentation into separate device, server and internet-connected networks.
  - b.) *Device Network*: Local network whose capacity and configuration are suitable for the level of video, audio and metadata data transmission established by the system design and its intended usage.
  - c.) *Server Network*: Local network whose capacity and configuration are suitable for the level of video data transmission, systems integration, and user operations established by the system design and its intended usage.
  - d.) *Internet-Connected Network*: Internet-connected network providing connection to remote VMS sites and private-to-public connection via ONVIF Out. This network is also used for remote user access via the mobile server.
  - e.) *Network Traversal*:
    - i. Enable software clients to access recording server services from outside a NAT firewall, by the use of public addresses and port forwarding.

- ii. Provide Remote Connect Services that enable secure remote connections to devices across different types of private and public networks.
- b. *Multi-System Architectures*: Provide the following architecture option for multi-site deployments:
  - 1.) *Distributed Recording Server Services*: Intended for sites with stable network connections between the central site and any number of remote sites.
    - a.) Management server at central site is providing user authentication and authorization for all distributed recording server services.
    - b.) Each site has at least one recording server.

## 2. **INSTALLATION**

- a. Deploy VMS in accordance with manufacturer's Deployment Best Practice Guide, including workstation and integration instructions and requirements.
- b. Collaborate with Owner's Representative on the application of manufacturer's hardening guide recommendations.
- c. Supervise installation to appraise ongoing progress of other trades and contracts, make allowances for all ongoing work, and coordinate the requirements of the VMS installation.
- d. *Drawings and Diagrams*:
  - 1.) System devices identified on building drawings are intended to generally indicate areas where such devices are to be located. Determine final location of these devices in accordance with Owner's requirements.
  - 2.) Riser diagrams are schematic and do not show every conduit, wire box, fitting, or other accessories. Provide such materials as necessary for a complete and functioning installation.
- e. Comply with manufacturer's written data, including product technical bulletins, product catalog installation instructions and product carton installation instructions.
- f. All firmware in products shall be the latest and most up-to-date provided by the manufacturer, or of a version as specified by the provider of the VMS to ensure approved integration compatibility.
- g. Install, configure, and test VMS for complete and proper operation.

## 3. **CLOSEOUT ACTIVITIES**

- a. Provide training as scheduled.
- b. Deliver printed or electronic reference materials that cover the entire training presentation.

## 4. **MAINTENANCE**

- a. Provide maintenance updates by VMS manufacturer per agreed schedule.

END OF SECTION



## **PART 3 EXECUTION**

### **3.01 INSTALLERS**

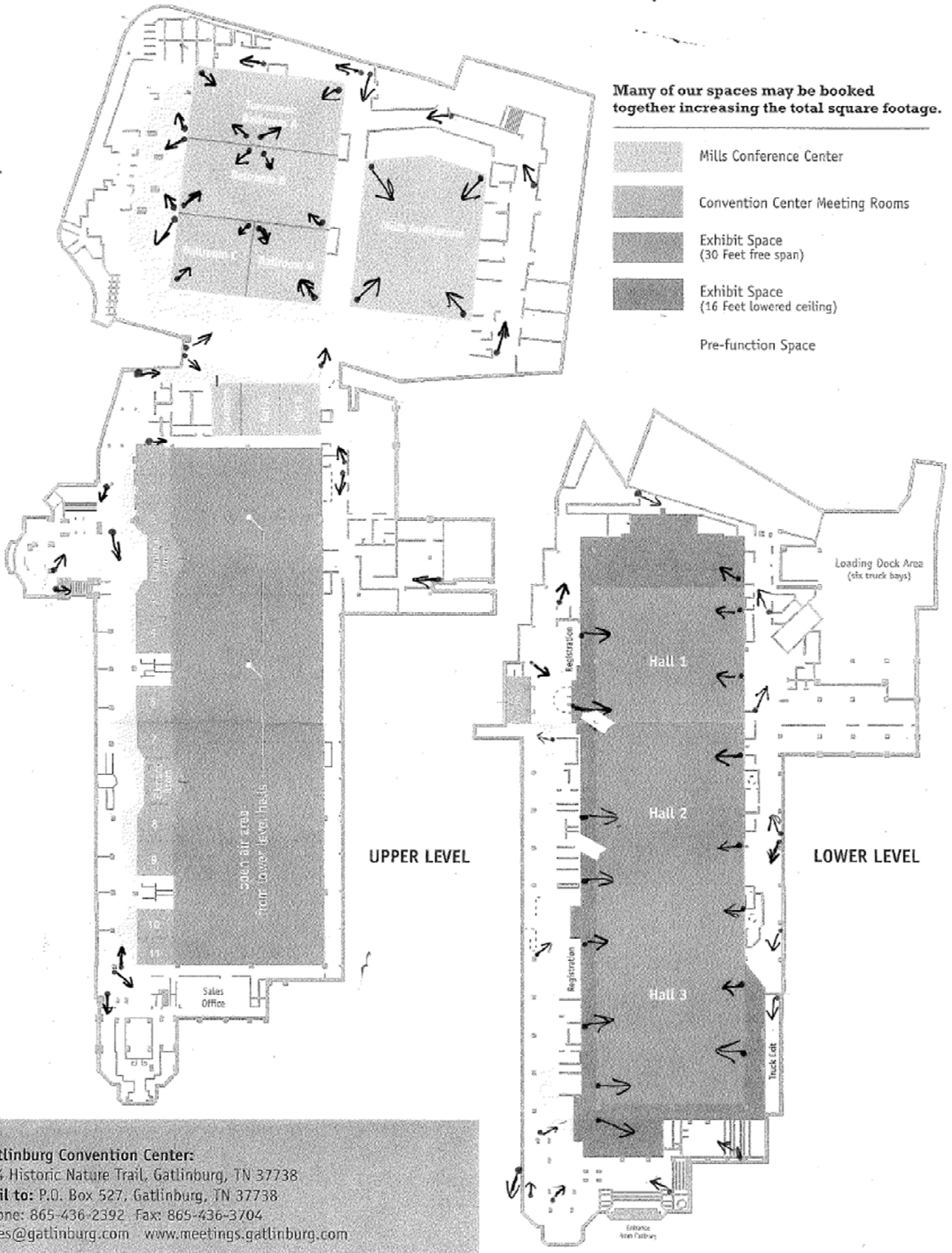
- A. Contractor personnel shall comply with all applicable state and local licensing requirements.

### **3.02 PREPARATION**

- A. The network design and configuration shall be verified for compatibility and performance with the camera(s).
- B. All BNC connectors will need to be replaced and cabling tested if reusing any existing cabling. Cables will need to be replaced as needed.
- C. Network configuration shall be tested and qualified by the contractor prior to camera installation.
- D. All firmware found in products shall be the latest and most up-to-date provided by the manufacturer, or of a version as specified by the provider of the Video Management Application (VMA) or Network Video Recorder (NVR).
- E. All equipment requiring users to log on using a password shall be configured with user/site-specific password/passwords. No system/product default passwords shall be allowed.

END OF SECTION

Each interest party must contact Scott Murphy to discuss the project and arrange a site visit if needed. Scott can be reached through the City of Gatlinburg's main number at 865-436-1400 ext 3115 or directly at 865-430-1036. Email address is below if needed.  
Scott Murphy      *scottm@gatlinburgtn.gov*



**Gatlinburg Convention Center:**  
 234 Historic Nature Trail, Gatlinburg, TN 37738  
**Mail to:** P.O. Box 527, Gatlinburg, TN 37738  
 Phone: 865-436-2392 Fax: 865-436-3704  
 sales@gatlinburg.com www.meetings.gatlinburg.com

Delea Patterson, AP/Purchasing  
City of Gatlinburg  
1230 Parkway East, Suite 2  
P.O. Box 5  
Gatlinburg, TN 37738

RE: Gatlinburg Convention Center Security Camera System Replacement

The specifications for the above-mentioned project have been reviewed and the following is offered (total to include all necessary cables, delivery, hardware and labor):

\$ \_\_\_\_\_  
Project Cost

Estimated time period after award that project can begin \_\_\_\_\_.

Estimated days to complete project \_\_\_\_\_.

Warranties provided with project: \_\_\_\_\_.

Any deviations from these specifications are listed below.

DEVIATIONS \_\_YES\_\_NO

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Signed/

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name (Print)

\_\_\_\_\_  
Telephone

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Fax Number

\_\_\_\_\_  
Address

\_\_\_\_\_  
Email (if applicable)

\_\_\_\_\_  
City          State      Zip

EACH BIDDER SHALL SUBMIT THIS STATEMENT OF COMPLIANCE WITH THEIR BID.

For Title VI and IX compliance, we ask for voluntary disclosure of the following information:

Gender:      Male                      \_\_\_\_\_

                    Female                      \_\_\_\_\_

Race:          Caucasian                      \_\_\_\_\_

                    African-American                      \_\_\_\_\_

                    Other (specify)                      \_\_\_\_\_

## BIDDERS LIST

### **Bob Goodson**

Account Manager

**M: 865-660-1262 | O: 865-691-1124**

**M3 Technology Group, Inc. |**

[M3TechGroup.com](http://M3TechGroup.com)

[BobGoodson@M3TechGroup.com](mailto:BobGoodson@M3TechGroup.com)

### **Fleenor Security Systems**

**6700 Baum Drive, Suite 22**

**Knoxville, TN 37919**

**(865) 544-9964**

[BrianM@fleenorsecurity.com](mailto:BrianM@fleenorsecurity.com)

### **KNOXVILLE SECURITY SERVICE LLC**

**Address: PO Box 11847, Knoxville  
TN 37939**

**Phone: Robert Barksdale**

**(865)368-5946**

**Email: [robert@knoxss.com](mailto:robert@knoxss.com)**

### **Gravity Network**

[jay@gogravity.net](mailto:jay@gogravity.net)