

## **SURVEILLANCE SYSTEMS SECTION 28 20 00**

### **PART 1 GENERAL**

#### **1.1. SUMMARY**

- A. This Section includes key information of a digital IP Video Surveillance System such as:  
Submittals, Quality Assurance, Manufacturers, Functional Description of System, Software,  
Supporting Hardware, Testing Procedures, and End-User Training.

### **PART 2 GENERAL**

#### **2.1. Submittals:**

- A. Product Data: For each type of product indicated.
- B. User Guide: Provides a brief overview of the system and instructions on how to perform general tasks or functions of the system.
- C. Installation Manual: Provides important product information and instructions on the installation of the specified system equipment/device/component.

#### **2.2. Commissioning**

- A. Prior to final acceptance of the access control system installation the following testing and documents shall be performed and provided to the Owner.
  - 1. Perform and document a complete system acceptance test.
  - 2. Provide testing reports indicating all devices tested, pass/fail status, and actions taken to resolve problem(s) on failed tests.
  - 3. Provide "as built" drawings showing each device and wiring connection.
  - 4. Provide a complete set of operating instructions for hardware devices and a complete software user manual.

#### **2.3. QUALITY ASSURANCE**

- A. Installer Qualifications: An experienced installer who is an authorized representative of the IP Video Surveillance manufacturer for both installation and maintenance of units required for this Project.
- B. Manufacturer Qualifications: A firm experienced in manufacturing systems similar to those indicated for this Project and with a record of successful in-service performance.
- C. Compliance with Local Requirements: Comply with applicable building code, local ordinances and regulations, and requirements of authorities having jurisdiction.

## Seneca Critical Access Hospital and Skilled Nursing Facility

Core and Shell Increment 1 OSHPD No. I230007-32-01

Core and Shell Increment 2 OSHPD No. I230007-32-02

Tenant Improvements Increment 3 OSHPD No. I230007-32-03

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D. Comply with NFPA 70.

### 2.4. DESIGN, MAINTENANCE, AND SUPPORT

#### A. System Design

1. All equipment and materials provided shall be standard components, regularly manufactured and used in the manufacturer's system.
2. All systems and components shall have been previously thoroughly tested and proven in actual use.

#### B. Warranty

1. All equipment specified in this section of this specification shall be protected by a one (1) year warranty commencing on the date of substantial completion of the project.
2. Advanced replacement parts shall be maintained by the system vendor to avoid lengthy periods of down time at no additional cost to Owner.

#### C. Support

1. Support for all IP Video Surveillance system components shall be provided through the availability of a toll free, 24-hour technical assistance program.
2. The manufacturer of the system specified and provided shall be capable of providing remote support through modem or internet access in order to provide system diagnostics and troubleshooting to the system integrator.

#### D. IP Video Surveillance Software Upgrades

1. IP Video Surveillance software upgrades that have been developed to fix a functionality problem shall be provided free of charge as long as the version of software provided under this specification remains the current manufacturer's version or for up to two (2) years after a new version release.
2. Major IP Video Surveillance revisions that provide new functionality to the product shall be provided free of charge for up to one (1) year from the date of substantial completion.

## PART 3 PRODUCTS

### 3.1. MANUFACTURERS

#### A. Manufacturers: Include the following:

1. Avigilon

500 Robson Street

Vancouver, British Columbia

888.281.5182

### 3.2. VIDEO MANAGEMENT SYSTEM (VMS)

- A. The Video Management System (VMS): Controls multiple sources of video surveillance subsystems in facility to collect, manage and present video in a clear and concise manner. Intelligently determines capabilities of each subsystem across single or multiple sites, allowing video management of any compatible analog or digital video device through a unified configuration platform and viewer.
- B. Product: Avigilon Control Center 7 Software
- C. System Components:
  - 1. VMS server (NVR), controller containing a database of all network-connected cameras, integrated components and their configurations.
  - 2. Workstations that render video and act as a main user/machine interface.
- D. System Hardware:
  - 1. VMS Server (NVR): Minimum hardware and operating system configuration:
    - 1) Operating System – Windows 8.1 / 10 (64-bit) with Microsoft .NET 4.6.2
    - 2) Processor – Intel dual-core CPU (2.0GHz).
    - 3) Memory – 4 GB DDR3
    - 4) Video – PCI Express, DirectX 10.0 compliant with 256 MB RAM
    - 5) Form Factor – 2U Rack Mount Chassis; 1U Rack Mount Chassis (NVR5 VAL Only)
  - 2. Product:
    - 1) NVR5 VAL (6, 12, 16, 24 TB)
    - 2) NVR5 STD (16, 24, 32, 48, 64 TB)
    - 3) NVR5 PRM (96, 128, 160 TB)
    - 4) NVR5 PRM (252, 288, 360, 432 TB)
  - 3. VMS Server Workstation and Video Appliance: Minimum hardware and operating system configuration:
    - 1) Operating System – 10/11 (64-bit)
    - 2) Processor – Intel i5 (11<sup>th</sup> Gen or better) (2.5 GHz)

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- 3) Memory – 16 GB DDR3
  - 4) Video – PCI Express, DirectX10 compliant, 4GB VRAM
  - 5) Storage – SSD 2TB
  - 6) Form Factor – Small Form Factor
4. Product:
- 1) NVR5-WKS-4TB
  - 2) NVR5-WKS-8TB