SECTION 13770
VIDEO SURVEILLANCE SYSTEM

PART 2 PRODUCTS

2.02 SYSTEM SPECIFICATIONS

A. General

The Contractor shall furnish all material and labor for a complete and operative Video Surveillance System including documentation, programming, and training.

B. Manufacturers

IPIX Corporation
Reston Executive Center
12120 Sunset Hills Road, Suite 410
Reston, VA 20190
(888) 909-4749 toll free
(703) 674-4100 phone
(703) 674-4101 fax
security@ipix.com

C. Product Specifications

1. Camera Assemblies

The camera shall optically capture wide field-of-view images at a location to process, store, and replay those images in a manner that recreates the perception of being at that location. The camera shall visualize an environment by capturing a full 360-degree field of view with a fisheye lens. It shall then de-warp the image to compensate for distortion errors that are inherent in fisheye images and present the image in a manner that can be easily understood by the viewer. The resulting image shall be capable of being viewed in any direction, up-down-left-right with no blind spots. This ability to digitally Pan-Tilt-Zoom shall be performed on both live and recorded video footage by multiple simultaneous users.

a. General
   1) Interface: Built in web server
   2) Motion Detection: Programmable Video Motion Detection
   3) Alarm Inputs & Outputs: Programmable Ports

b. Operational
   1) Imager: 2 Megapixel sensor
   2) Active Pixel Count: 1,600 (horizontal) X 1,200 (vertical) pixels
   3) Dynamic Range: 60 dB
   4) Auto Recovery: Embedded watchdog
   5) Luminance: Less than 1 lux

c. Image
   1) Format: JPEG still images and Motion JPEG video
   2) Compression: High Speed hardware-based image compression
   3) Resolution: 1,100 X 1,100
   4) High Image Quality: 11 fps (125k)
   5) Medium Image Quality: 20 fps (64k)

d. Lens
   1) Len Mount: CS screw mount
   2) Sensor Format: ½-inch color CMOS, 1600 x 1200 pixels

3) Mapping: F-Theta
4) Field of View: 185-degree circle
5) Fixed Focal Length: 1.4mm
6) Focus Range: 0.1 meter to infinity

e. Data Network
1) Connectivity: Single connection, 10/100BaseT, copper or multimode ST fiber

f. Supported Protocols
1) Standards: TCP/IP, HTTP, FTP, RTP/RTSP, DHCP

g. Security
1) Access: Password/username protection for restricted camera access

h. Electrical
1) AC Voltage: 24VAC +/- 10%
2) DC Voltage: 12VDC +/- 10%
3) Maximum Current: 4 Watts

i. Mechanical
1) Lens Mount: CS type Megapixel lens must be used
2) Unit Weight: Nine Tenths (0.9) of a pound

j. Environmental
1) Operating Temperature: 0 to 45 Degrees Celsius
2) Storage Temperature: 40 to 70 Degrees Celsius
3) Humidity: 0% to 90% relative, non-condensing

k. Regulatory
1) Emissions: FCC: Part 15, Class B
2) Certification: CE
3) Safety: UL Listed

l. Connectors
1) Input Power: Terminal
2) Network: RJ-45
3) Alarm Input: AWG 18 to 28 Terminal
4) Alarm Output: AWG 18 to 28 Terminal

2. Camera Mounts

The mounts shall be compatible with the camera, suitable for the application and be provided by the same manufacturer.

a. Flush Mount Kit: IPIX model CV-FMK
b. Recessed Dome Kit: IPIX model CV-RDK
c. Rail Mount Kit: IPIX model CV-RDK

3. Auxiliary Power Supplies

All fixed cameras may be powered through a local power source. PTZ cameras shall need a separate power supply for heaters, blowers, and wireless interface equipment if needed. The power supply shall be of the appropriate voltage and current rating for each location's needs. The power supply shall be manufactured by Altronix and include surge suppression and lightning protection.

4. Video Transmission Systems

All video transmission shall be over a separate security Ethernet network unless bandwidth is available on [OWNER]'s existing network and approved for use by the IT Department.

5. Wiring

All wiring will be via the Ethernet network except for the power wiring to cameras. Power wiring shall be size according to the distance between the power source and the camera. The voltage drop at the camera shall not be more than five percent (5%) of the supply voltage at the source.