item #1112288A – IP Video detection camera assembly

Description: Furnish and install an IP (Internet Protocol) Video Detection Camera Assembly (IPVDCA) as shown on the plans or as directed by the Engineer. The IPVDCA consists of an IP Video Detection Camera, lens, enclosure, mounting hardware and equipment necessary to provide the specified video signal to the video detection processor.

Materials: All hardware shall be new, corrosion resistant. All equipment shall be current production.

# IP Video Detection Camera Assembly:

Camera:

* Use appropriate CS-mount lens to provide adequate detection
* Single Power Over Ethernet (POE) connection for power and data collection
* Active picture elements (pixels): 2560 (H) x 1920 (V), minimum
* Heated camera
* IP addressable

Camera Enclosure:

* Tamper proof constructed of aluminum
* IP66-rated camera housing

Camera Mounting Hardware:

* Swivel bracket for dual plane adjustment for leveling
* Hybrid terminal junction box with surge
* Astro-Bracket banded bracket

Environmental:

* Comply with NEMA TS 2, Section 2 requirements for Controller Assembly
* Pass the following NEMA TS 2 tests and applicable test procedures
* Vibration: Section 3.13.3, Section 3.13.8
* Shock: Section 3.13.4, Section 3.13.9
* Transients, Temperature, Voltage and Humidity: Section 3.13.7
* Power Interruption: Section 3.13.10

**Construction Methods:**

Site Survey: Perform a Site Survey with the IPVDCA manufacturer’s representative for all IPVDCA locations prior to installation. The purpose of the Survey is to optimize the performance of the IPVDCA equipment when it is installed and ensure that it will meet the accuracy requirements specified. Prior to installation, submit the results of the Site Survey to the Engineer in a report which lists all IPVDCA locations with any recommended changes to camera locations, mounting adjustments, camera lens adjustments, and desired detection zone locations.

Install IPVDCA equipment in accordance with the manufacturer’s instructions and the attached details to achieve the detection zones in the location(s) determined as a result of the Site Survey. Refer to the “Installation Best Practices Guide” attached below to this specification. Note that all references to “Cat5e cable” in the attached “Installation Best Practices Guide” shall refer to “23 AWG 4 Twisted Pair Category 6 Cable” as specified in “Item #1113725A – 23 AWG 4 Twisted Pair Category 6 Cable.”

Documentation: (IPVDCA**)**

Provide to CTDOT Office of Maintenance three (3) copies of equipment manuals furnished by the manufacturer, including the following:

* Installation and operation procedures
* Performance specifications (functions, electrical, mechanical and environmental) of the unit
* Schematic diagrams (point to point wiring)
* Pictorial of component layout on circuit board
* List of replaceable parts including names of vendors for parts not identified by universal part numbers such as JEDEC/RETMA or EIA
* Troubleshooting, diagnostic and maintenance procedures

Warranties and Guarantees: (IPVDCA)

Provide warranties and guarantees to the CTDOT Office of Maintenance in accordance with Article 1.06.08 of the Standard Specifications. Warranties for all equipment furnished as part of this Contract are to cover a period of 36 months following successful completion of the entire intersection acceptance test.

Method of Measurement: The IP Video Detection Camera Assembly will be measured for payment as the number of each assembly of IP video cameras, lenses, enclosures and mounting hardware furnished, installed, operational and accepted.

Basis of Payment: This item will be paid at the Contract unit price for each “IP Video Detection Camera Assembly” complete and accepted, which price shall include the Site Survey, IP video camera, lens, enclosure, brackets used to attach the IP video camera to a support structure or extension bracket, documentation, warrantee, labor, tools and equipment necessary to provide the specified video signal to the video detection processor.

## Pay Item Pay Unit

IP Video Detection Camera Assembly ea.





