

ITEM 9000-0002 – CLOSED LOOP SYSTEM COMPUTER

DESCRIPTION – This work is the furnishing, installing and energizing computer hardware equipment necessary to operate the closed loop signal system upgrade. The system computer is to be located at the City of Reading Public Works facility. A secondary system computer is to be located at the City of Reading Police Department, Traffic Division. Cellular service is necessary to facilitate communication with the system computer and the on-street masters will be the responsibility of the contractor under Item 9000-0004. The secondary system computer located in the Police Department Traffic Division will communicate with the system computer via the cities' network system. To facilitate all communications, the contractor is to coordinate with the cities' Information Technology Division, Ken Cochran, 610-655-6321.

MATERIAL – In accordance with Section 950.2, 952.2, 953.2, and as follows:

1. System hardware – Provide and install a central control computer.

Provide a computer to meet the following minimum requirements:

- Operating system – Windows 11.
- Processor – Intel i7.
- Memory – 16GB RAM.
- Hard Disk – 1 TB.
- Four (4) USB ports.
- Monitor – 22 Inch, 1920x1080 Full HD resolution or higher.
- Keyboard.
- Cordless Mouse.
- Internet access
- Cellular communications through Applied Information Systems Software.
- Printer – Color, 1200x1200 dpi with 1 ream of paper.
- Network Adapter Dual port 10 Gb.
- Web Browser – Microsoft Edge.

CONSTRUCTION – In accordance with Section 953.3 and as follows:

Provide and install the central computer in the City of Reading Public Works facility. Contact Tim Kral, City Engineer at 610-655-1850 for location and schedule of install. Provide and install the secondary central computer in the City of Reading Police Department, Traffic Division. Contact Darrin Dougherty, Police Sergeant at 610-655-6116 for location and schedule of install.

Contact cities' Information Technology Division, Ken Cochran, 610-655-6321 to provide cities' network connection between the two computers and coordinate installation of AI cellular connections between the system computers and the system master controllers. Cellular service (AI Systems) for the system computers and master controller locations

to be provided for ten (10) year term is incidental to this item. Connect cellular service to computer. Establish system communications with on/off street masters. Establish system communications with Cities Police Department computer, contact Darrin Dougherty, Police Sergeant at (610)-655-6116 and Ken Cochran, Cities Information Technology Division at 610-655-6321 to coordinate connection of closed loop system computer with police department computer through the cities network computer system. Implement time settings in accordance with the coordination plans and establish traffic signal systems data base. Install surge protection on master power and communication lines. Establish intersection graphics for all system intersections. All intersection and system graphics to be provided by contractor before the start of the 30-day testing period.

Provide complete and thorough manuals, maintenance procedures, schematics, and technical documentation of the central system computer.

MEASUREMENT AND PAYMENT – Each. System complete in place per schedule:

20% payment upon delivery.

80% payment upon start-up of signal system.