ITEM 680.82511001 – RADIO/GPS PRIORITY CONTROL SYSTEM - INTERSECTION EQUIPMENT

DESCRIPTION:

This work shall consist of furnishing and installing new intersection equipment for a Radio/GPS Priority Control System in accordance with the contract documents, standard sheets, manufacturer's instructions, requirements of the Fire Department's representative, requirements of the City's representative and the engineer's requirements.

MATERIALS:

All components, furnished, assembled, fabricated or installed shall be new and strict accordance with all of the details shown in the contract documents or as specified by the Engineer. The specific components used, shall be a Phase Selector (Model 1000) and a Radio/GPS Unit (Model 1010) for an Opticom GPS Priority Control System manufactured by 3M Traffic Control or approved equal. The system interface software specified in the Special Notes section of the Project Manual under the GPS Priority Control System Software shall be used for programming the phase selector card. No separate payment will be made to the Contractor for the software.

The contractor shall program the Radio/GPS Priority Control System by mapping and setting the preemption zones per the manufacturer’s and City representative's instructions at each intersection shown in the contract documents or as directed by the Engineer. No separate payment will be made to the Contractor for programming the Priority Control System.

CONSTRUCTION DETAILS:

The contractor shall install the equipment in accordance with the contract documents, standard sheets, manufacturer's instructions, requirements of the Fire Department's representative, requirements of the City's representative and the engineer's requirements.

Prior to the installation of intersection equipment, the Contractor's personnel shall have received training from the supplier and/or manufacture on installation, operations, testing and maintenance of all equipment. No intersection equipment will be accepted without proof of training.

The Phase Selector will be installed directly into the cabinet.

The Radio/GPS unit shall be installed on a traffic signal pole as shown in the contract documents or as directed by the Engineer.

Testing Requirements: The Priority Control System shall be subjected to the level of testing described in the General Provisions of the Special Notes. No separate payment will be made to the contractor to perform the testing requirements.

Training Requirements: The Priority Control System shall be subjected to the training requirements described in the General Provisions of the Special Notes. No separate payment will be made to the contractor to perform the training requirements.

Ten (10) complete sets of operation and maintenance manuals shall be provided for
these items. The manuals shall include, as a minimum, the following:

- Equipment operation
- Complete installation procedures
- Complete performance specifications (functional, electrical, mechanical, and environmental)
- Complete and accurate troubleshooting, diagnostic and maintenance producers

In the presence of the engineer and City representative, the contractor shall demonstrate that the mapping and pre-emption zones have been programmed to the satisfaction of the City representative. The City representative shall give written certification to the Contractor that the mapping and setting of the preemption zones of the system are functioning to his or her satisfaction.

The pre-emption equipment will not be accepted without this certification

**METHOD OF MEASUREMENT:**

The measurement for payment is the number of each complete set of intersection equipment (Phase selector and Radio/GPS Unit) furnished, installed and operating in accordance with the contract documents, standard sheets, manufacturer's instructions, requirements of the Fire Department's representative, requirements of the City's representative and the engineer's requirements.

**BASIS OF PAYMENT:**

The price bid for the Priority Control System will include the cost of furnishing all labor, materials, tools, equipment, and incidentals necessary to complete the installation and operation of the Priority Control System. The progress payments provisions in the General Provisions of the Special Notes shall be applied to the payment of the intersection Priority Control equipment.