

**SECTION 603**

**GENERAL REQUIREMENTS FOR  
EQUIPMENT, MATERIALS AND EVALUATION**

The requirements of Article 603-8 are expanded and modified as follows:

Documentary items shall be furnished for the following equipment:

- (1) 170 Controllers
- (2) Loop Detector Sensor Units
- (3) Conflict-Voltage Monitors
- (4) Load Switch Packs
- (5) Flasher Units
- (6) Power Supply Module
- (7) AC and/or DC Isolator Units
- (8) Program Module
- (9) Power Distribution Assemblies
- (10) Auxiliary Output Files
- (11) Current Monitors
- (12) Fiber Optic Transceivers
- (13) Fire Preemption Telemetry Transceivers
- (14) Equipment with the following functions:
  - (a) Logic
  - (b) Timing
  - (c) Communications
- (15) All other equipment called for in the Contract Documents

Documentation shall be delivered no later than the equipment to which it pertains. The required number of sets of documentation is a function of the number of units delivered as follows:

<b><u>NUMBER OF UNITS OF EQUIPMENT</u></b>	<b><u>NUMBER OF SETS OF DOCUMENTS</u></b>
1 - 5	5
6 - 15	12
16 or over	18

The Contractor shall supply to the Engineer, for use by the Engineer and the Maintaining Agency, four (4) paper copies and one AutoCAD™, release 14 or later electronic copy format, of the cabinet wiring diagram for each intersection. The wiring diagram shall show all cabinet wiring, terminal strip and equipment connector termination's and terminal strip and equipment connector designations. Cabinet wiring diagrams shall show the complete wiring of cabinets with all components clearly identified as to function. All components in the cabinet shall be labeled according to their function and in such manner that they may easily be found in the wiring diagram. Test switches, reset switches and other control functions shall be clearly labeled as to their function. The manufacturer's name, serial and model numbers of the controller and associated equipment, the date installed and the signal group and/or project number shall be provided. These documents shall be contained in a pouch inside the pullout compartment of the cabinet.

A list of equipment to be housed in each cabinet at each intersection shall be submitted to the Engineer and to the Maintaining Agency.

The requirements of Section 603 are expanded by the following:

**603-10 QUALIFICATION OF WORKMEN:**

Due to the complexity of modern day traffic control equipment and operation, it is essential that those persons installing, operating and maintaining traffic control equipment be fully trained and qualified. Traffic control equipment is not only electrical, but also requires the Contractor and technicians to understand and diagnose problems with electronic equipment, including microprocessors and telemetry devices, and to understand and implement traffic signal timing and phasing.

Therefore, the signal contractor who is engaged in installing traffic signals in the Maintaining Agency's jurisdiction within FDOT District III shall secure all permits for installation or revision work to the traffic signal location(s). These permits shall be secured by an individual possessing a Certificate of Competency as a Master Electrician. In addition, a Journeyman Electrician that is certified by the International Municipal Signal Association (I.M.S.A.), Level II or Higher, Traffic Signals (Electrical) shall be present on the job site at all times the traffic signalization work is in progress.

The contractor that engages in maintaining traffic signal installations shall employ an individual that possesses certification by the International Municipal Signal Association (I.M.S.A.), as a Level III, Traffic Signals (Electronics). Likewise, the Contractor shall have technician(s) for the maintaining of the traffic signals that are under the direct supervision of the Level III individual. Their work shall be performed by an individual(s) certified by the International Municipal Signal Association (I.M.S.A.), Level II or Higher, Traffic Signals (Electronics). Either individual must be on the job site or able to respond within four (4) hours of notification of any problem or emergency which may arise.

The Maintaining Agency requires all installations or revisions of traffic signal equipment installed under their direction to be performed by an individual possessing a Certificate of Competency as a Journeyman Electrician and certified by the International Municipal Signal Association (I.M.S.A.), Level II or higher, Traffic Signals (Electrical or Electronics).

The City of Tallahassee shall assign either their Traffic Signal Construction Supervisor or their Traffic Signal Maintenance Supervisor to serve as their inspector on the job site during the inspection of any traffic signal installation. After the Traffic Signal installation has been accepted by the City of Tallahassee, the traffic signal maintenance shall be performed for the Maintaining Agency by certified technicians of IMSA Level II or higher (Electronics) and shall be under the direction of an individual that possesses certification by the International Municipal Signal Association (I.M.S.A.), as a Level III, Traffic Signals (Electronics).