

RON DESANTIS GOVERNOR 605 Suwannee Street Tallahassee, FL 32399-0450 JARED W. PERDUE, P.E. SECRETARY

September 21, 2022

Khoa Nguyen Director, Office of Technical Services Federal Highway Administration 3500 Financial Plaza, Suite 400 Tallahassee, Florida 32312

Re: State Specifications Office

Section: 680

Proposed Specification: 6800000 System Control Equipment.

Dear Mr. Nguyen:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

The changes are proposed by Matt DeWitt from the Traffic Engineering and Operations Office to move all materials requirements from Division II to Division III. This change is associated with the proposed changes to Section 995.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via email to daniel.strickland@dot.state.fl.us.

If you have any questions relating to this specification change, please call me at (850) 414-4130.

Sincerely,

Signature on file

Daniel Strickland, P.E. State Specifications Engineer

DS/ra

Attachment

cc: Florida Transportation Builders' Assoc.

State Construction Engineer

# SYSTEM CONTROL EQUIPMENT (REV 7-21-22)

SECTION 680 is deleted and the following substituted:

# 680-1 Description.

Furnish and install system control equipment as shown in the Plans. Meet the requirements of Section 603.

#### 680-2 Materials.

**680-2.1 General:** Use system control equipment and components that meet the requirements of these Specifications and are listed on the Department's Approved Product List (APL).

680-2.2 Adaptive Signal Control System: Adaptive signal control systems external to the traffic controller place detector calls to the traffic signal controller to adjust signalization timing based on measured traffic conditions independently of the traffic signal controller's preconfigured timings.

The system must interface with the traffic controller using either the Synchronous Data Link Control (SDLC) Port 1 interface and protocol or 24 V<sub>DC</sub> inputs/outputs available in the traffic controller cabinet. Dynamically modifying controller configuration settings through serial communications is not allowed.

The system must include a user interface that allows the configuration of subcomponents, such as detectors and cameras, and includes remote monitoring and reporting. The system must include the option of incorporating existing vehicle detection in addition to the primary detection used by the adaptive signal control system.

The system must not affect the normal operation of the traffic signal controller

upon any failure of communication, detection, or system component.

Ensure adaptive signal control system hardware is permanently marked with manufacturer name or trademark as well as part number and serial number. Ensure that the markings are visible after installation.

680-2.3 Environmental Requirements: Ensure system control equipment performs all required functions during and after being subjected to the transients, temperature, voltage, humidity, vibration, and shock tests described in NEMA TS2, 2.2.7, 2.2.8, and 2.2.9.

### 680-3 Installation Requirements.

Install all system control equipment in accordance with the manufacturer's recommendations. Terminate wires on the appropriate terminal strips in the controller cabinet with insulated terminal lugs. Neatly bundle, secure, and identify all wiring and cables.

## 680-4 Warranty.

Ensure system control equipment has a manufacturer's warranty covering defects for a minimum of three years. The warranty must include provisions for providing replacements within 10 calendar days of notification for defective parts and equipment during the warranty period at no cost to the Department or the maintaining agency.

## 680-5 Method of Measurement.

The Contract unit price for system control equipment, furnished and installed, will include all materials, equipment, hardware labor and miscellaneous materials necessary for a complete and accepted installation.

# 680-6 Basis of Payment.

Price and payment will be full compensation for all work specified in this Section. Payment will be made under:

Item No. 680- 1 System Control Equipment - each.

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