



*Florida Department of Transportation*

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GOVERNOR

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Tallahassee, FL 32399-0450

JARED W. PERDUE, P.E.  
SECRETARY

September 12, 2023

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

Re: State Specifications Office  
Section: **676**  
Proposed Specification: **6760301 Traffic Cabinets.**

Dear Mr. Nguyen:

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

The changes are proposed by Derek Vollmer to define minimum requirements for cabinet risers, update terminology for consistency between the Specification and the Standard Plans, and consolidate requirements for cabinets where possible.

Please review and transmit your comments, if any, within two weeks (10 business days). Comments should be sent via email [daniel.strickland@dot.state.fl.us](mailto: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/dh

Attachment

cc: Florida Transportation Builders' Assoc.  
State Construction Engineer

Note: Some original language has been moved within this revision.

**TRAFFIC CABINETS.**  
**(REV 8-10-23)**

SUBARTICLE 676-3.1 is deleted and the following substituted:

**676-3 Installation Requirements.**

**676-3.1 General:** Ground all cabinets in accordance with the requirements of Section 620. Keep the ground wire from the cabinet ground busbar to the ground rod assembly or array as short as possible. Ensure the ground wire is not in contact with any other part of the cabinet. ~~Controller cabinets shall be wired in accordance with the signal operating plan specified in the Contract Documents. If phases are omitted for future use, the cabinet must be wired for these future phases. However, the load switches for the future phases do not have to be furnished.~~ All field drilled conduit entrance holes or other holes must be reamed and free of burrs. All conduit connections to cabinets and small equipment enclosures must be weatherproof. Ensure cabinet doors do not pinch or damage interior cables or displace equipment when doors are open, closed, or in motion.

~~(e) Construct cabinet bases and maintenance service slabs as shown in Standard Plan 676-010 unless otherwise shown in the Plans.~~ Construct ~~the base for the cabinets with~~ cabinet bases and maintenance service slabs without risers using concrete in accordance with Section 347. Construct cabinet bases and maintenance service slabs with risers using concrete in accordance with Section 346. Make the concrete base and maintenance service slab for the cabinet level, free of honeycombs, and as smooth as possible with a broomed finish. Temporarily seal the end of conduit risers located in the base before placing the concrete. Ensure conduit remains clear of debris. Position the end of the conduit risers a minimum of 2 inches above the finished surface of the concrete base.

SUBARTICLE 676-3.2 is deleted and the following substituted:

**676-3.2 Traffic Signal Controller Cabinet Installation:** Install traffic signal controller cabinets and concrete risers in accordance with Standard Plans, Index 676-010. ~~Controller cabinets shall be wired~~ Wire controller cabinets in accordance with the signal operating plan specified in the Contract Documents. If phases are omitted for future use, the cabinet must be wired for these future phases. ~~However, the~~ Load switches for the future phases do not have to be furnished.

SUBARTICLE 676-3.2.2 is deleted and the following substituted:

**676-3.2.2 Base-Ground Mounted Cabinets:**

(a) Use anchor bolts to fasten base-ground mounted cabinets to the concrete base.

(b) Seal the joint between the bottom of the cabinet and the concrete base (inside and outside of cabinet) with a clear silicone rubber sealant.

~~(c) Construct the base for the cabinets with concrete in accordance with Section 347. Make the concrete base for the cabinet level, free of honeycombs and as smooth as~~

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~~possible. Temporarily seal the end of conduit risers located in the base before placing the concrete. Position the end of the conduit risers a minimum of 2 inches above the finished surface of the concrete base.~~

SUBARTICLE 676-3.3 is deleted and the following substituted:

**676-3.3 Intelligent Transportation System Cabinet Installation:** Mount the cabinet as shown in the Plans and provide the cabinet with the necessary base or pole mount hardware. Ensure that pole and structure-mounted field cabinets have mounting brackets on the side so that both cabinet doors are fully functional. Provide an adapter bracket for pole mounted cabinets that is designed to allow banding straps to be installed without obstructing pole handholes.

Make provisions for all data, control, and confirmation connections between the ITS device and field cabinet and for any required wiring harnesses and connectors.

Place a heavy-duty resealable plastic bag on the backside of the main cabinet door for storing a list of terminal block connections and other cabinet documentation.

Place all equipment in the cabinet according to the recommendations of the manufacturer. Maintain a minimum clearance of 6 inches between the top of the cabinet and the top of any equipment placed on the top shelf of the cabinet and a minimum clearance of 2 inches between each side of the cabinet and any equipment placed on the cabinet shelves.

~~Construct a maintenance service slab as shown in Standard Plan 676-010 or as shown in the Plans. Construct the maintenance service slab with concrete in accordance with Section 347.~~

ARTICLE 676-4 is deleted and the following substituted:

**676-4 Warranty.**

Ensure cabinets ~~and~~, enclosures, ~~and risers~~ have a manufacturer's warranty covering defects for a minimum of ~~two~~ 2 years from the date of final acceptance ~~in accordance with 5-11 and Section 608~~. The warranty must include providing replacements, within 10 calendar days of notification, for defective parts and equipment during the warranty period at no cost to the Department or maintaining agency.

ARTICLE 676-5 is deleted and the following substituted:

**676-5 Method of Measurement.**

The Contract unit price each for cabinet ~~or~~, enclosure, ~~or riser~~, furnished and installed, will include all materials specified in the Contract Documents, and all labor, equipment, and miscellaneous materials necessary for a complete and acceptable installation.

No separate payment will be made for a traffic signal controller cabinet when included with the controller assembly as per Section 670.

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## **TRAFFIC CABINETS.**

**(REV 8-10-23)**

SUBARTICLE 676-3.1 is deleted and the following substituted:

### **676-3 Installation Requirements.**

**676-3.1 General:** Ground all cabinets in accordance with the requirements of Section 620. Keep the ground wire from the cabinet ground busbar to the ground rod assembly or array as short as possible. Ensure the ground wire is not in contact with any other part of the cabinet. All field drilled conduit entrance holes or other holes must be reamed and free of burrs. All conduit connections to cabinets and small equipment enclosures must be weatherproof. Ensure cabinet doors do not pinch or damage interior cables or displace equipment when doors are open, closed, or in motion.

Construct cabinet bases and maintenance service slabs as shown in Standard Plan 676-010 unless otherwise shown in the Plans. Construct cabinet bases and maintenance service slabs without risers using concrete in accordance with Section 347. Construct cabinet bases and maintenance service slabs with risers using concrete in accordance with Section 346. Make the concrete base and maintenance service slab level, free of honeycombs, and with a broomed finish. Temporarily seal the end of conduit risers located in the base before placing the concrete. Ensure conduit remains clear of debris. Position the end of the conduit risers a minimum of 2 inches above the finished surface of the concrete base.

SUBARTICLE 676-3.2 is deleted and the following substituted:

**676-3.2 Controller Cabinet Installation:** Install traffic signal controller cabinets and concrete risers in accordance with Standard Plans, Index 676-010. Wire controller cabinets in accordance with the signal operating plan specified in the Contract Documents. If phases are omitted for future use, the cabinet must be wired for these future phases. Load switches for the future phases do not have to be furnished.

SUBARTICLE 676-3.2.2 is deleted and the following substituted:

#### **676-3.2.2 Ground Mounted Cabinets:**

(a) Use anchor bolts to fasten ground mounted cabinets to the concrete base.

(b) Seal the joint between the bottom of the cabinet and the concrete base (inside and outside of cabinet) with a clear silicone rubber sealant.

SUBARTICLE 676-3.3 is deleted and the following substituted:

**676-3.3 Intelligent Transportation System Cabinet Installation:** Mount the cabinet as shown in the Plans and provide the cabinet with the necessary base or pole mount hardware. Ensure that pole and structure-mounted field cabinets have mounting brackets on the side so that

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both cabinet doors are fully functional. Provide an adapter bracket for pole mounted cabinets that is designed to allow banding straps to be installed without obstructing pole handholes.

Make provisions for all data, control, and confirmation connections between the ITS device and field cabinet and for any required wiring harnesses and connectors.

Place a heavy-duty resealable plastic bag on the backside of the main cabinet door for storing a list of terminal block connections and other cabinet documentation.

Place all equipment in the cabinet according to the recommendations of the manufacturer. Maintain a minimum clearance of 6 inches between the top of the cabinet and the top of any equipment placed on the top shelf of the cabinet and a minimum clearance of 2 inches between each side of the cabinet and any equipment placed on the cabinet shelves.

ARTICLE 676-4 is deleted and the following substituted:

**676-4 Warranty.**

Ensure cabinets, enclosures, and risers have a manufacturer's warranty covering defects for a minimum of 2 years from the date of final acceptance. The warranty must include providing replacements, within 10 calendar days of notification, for defective parts and equipment during the warranty period at no cost to the Department or maintaining agency.

ARTICLE 676-5 is deleted and the following substituted:

**676-5 Method of Measurement.**

The Contract unit price each for cabinet, enclosure, or riser, furnished and installed, will include all materials specified in the Contract Documents, and all labor, equipment, and miscellaneous materials necessary for a complete and acceptable installation.

No separate payment will be made for a traffic signal controller cabinet when included with the controller assembly as per Section 670.