Florida Department of Transportation

RON DESANTIS
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

KEVIN J. THIBAULT, P.E.
SECRETARY

July 9, 2019

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

Re: State Specifications Office
Section: **677**
Proposed Specification: **6770201 Equipment Shelter.**

Dear Mr. Nguyen:

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

The changes are proposed by Derek Vollmer of the State Traffic Engineering Research Lab (TERL) to modify the language.

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

If you have any questions relating to this specification change, please call me at 414-4140.

Sincerely,

Signature on file

Stefanie D. Maxwell, P.E.
Manager, Program Management Office

SM/dt
Attachment
cc: Florida Transportation Builders' Assoc.
State Construction Engineer

EQUIPMENT SHELTER.
(REV 5-10-19)

SUBARTICLE 677-2.1 is deleted and the following substituted:

677-2.1 General: Ensure that the shelter includes a secure door; power distribution panels; a heating, ventilation, and air conditioning (HVAC) system; lightning protection, grounding, and any other components necessary for a completely integrated communication building. Ensure that the shelter is constructed and installed according to local building codes.

Provide a shelter designed for the following loads: wind: 170 MPH; floor: 200 pounds per square foot; slab: 200 pounds per square foot; roof: 100 pounds per square foot. Submit design drawings that meet all minimum standards and are signed and sealed by a registered Professional Engineer in the State of Florida.

The shelter's exterior shall have an exposed concrete aggregate finish. The shelter must have a bullet-resistant exterior surface in accordance with UL 752. The shelter's exterior color is to be earth tone. Alternative exterior finishes or colors may be approved by the Engineer.

~~Ensure that the equipment shelter's heat transfer coefficient does not exceed 0.07 British Thermal Units (BTUs) per hour per square foot per degree Fahrenheit (F) for the roof and 0.28 BTUs per hour per square foot per degree F for the exterior wall.~~

SUBARTICLE 677-2.4 is deleted and the following substituted:

677-2.4 Walls: Vapor shield the walls to prevent moisture penetration and install rigid board insulate~~e~~ion ~~the walls~~ for a minimum insulating factor of R-14. Attach the vapor shield and insulation directly to the concrete wall avoiding any air gap. Interior surfaces are to have a white textured finish wall covering with molding on all corners. All floor~~/~~ and wall intersections are to have 4 inch vinyl baseboards installed using waterproof adhesive.

SUBARTICLE 677-2.5 is deleted and the following substituted:

677-2.5 Ceiling and Roof: The interior room height is to be no less than ~~8~~9 feet above the floor and capable of supporting the proposed electrical fixtures and cable trays. The roof section shall have a 1/8 inch per foot minimum pitch for drainage. Fill all voids between the ceiling and roof with a vapor shield and install rigid board insulation for a minimum Type insulating factor of R-21 insulation. Attach the vapor shield and insulation directly to the concrete ceiling avoiding any air gap.

SUBARTICLE 677-3.1 is deleted and the following substituted:

677-3.1 General: Provide and detail the equipment shelter installation, including site layout, fencing, and all other features. Submit this drawing for approval prior to the start of construction.

Concrete is to be Class I in accordance with Section 346. Perform concrete structures work in accordance with Section 400. Obtain precast products from a plant that is currently on the Department's Production Facility Listing. Producers seeking inclusion on the list shall meet the requirements of Section 105. Submit to the Engineer all permit documents for approval prior to starting the work.

Complete construction of the shelter foundation prior to delivery of the equipment shelter. Provide primary electrical power service, or generator power, to the site prior to delivery of the equipment shelter.

Begin shelter installation on the foundation within two days of shelter delivery to the jobsite. Complete the grounding and electrical connections to the shelter.

Upon completion of shelter installation dehumidify the shelter. Keep the shelter door closed for a period of 15 minutes and cycle the heat with the HVAC thermostat set on 85 degrees Fahrenheit. The vendor shall return the HVAC units to normal operation mode once the dehumidification process is complete.

In the event that shelter installation and primary or back up power connections to the shelter are delayed, then a portable dehumidifier shall be installed and operated until the shelter installation and power connection is complete. Install the portable dehumidifier with minimum performance capability, at 80 degrees Fahrenheit and 60% relative humidity, of 30 pints~~/~~ per day water removal rate. Install a drain to route water away from the shelter.

EQUIPMENT SHELTER.
(REV 5-10-19)

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677-2.1 General: Ensure that the shelter includes a secure door; power distribution panels; a heating, ventilation, and air conditioning (HVAC) system; lightning protection, grounding, and any other components necessary for a completely integrated communication building. Ensure that the shelter is constructed and installed according to local building codes.

Provide a shelter designed for the following loads: wind: 170 MPH; floor: 200 pounds per square foot; slab: 200 pounds per square foot; roof: 100 pounds per square foot. Submit design drawings that meet all minimum standards and are signed and sealed by a registered Professional Engineer in the State of Florida.

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SUBARTICLE 677-2.5 is deleted and the following substituted:

677-2.5 Ceiling and Roof: The interior room height is to be no less than 9 feet above the floor and capable of supporting the proposed electrical fixtures and cable trays. The roof section shall have a 1/8 inch per foot minimum pitch for drainage. Fill all voids between the ceiling and roof with a vapor shield and install rigid board insulation for a minimum Type insulating factor of R-21 insulation. Attach the vapor shield and insulation directly to the concrete ceiling avoiding any air gap.

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