ORIGINATION FORM
Proposed Revisions to the Specifications
(Please provide all information - incomplete forms will be returned)

Date: 5/8/2019

Office: Traffic Engineering and Ope

Originator: Derek Vollmer

Specification Section: 677

Telephone: 850-921-7361

Article/Subarticle: 2, 2.4, 2.5, 3.1

email: Derek.Vollmer@dot.state.fl.us

Will the proposed revision require changes to:

Publication	Yes	No	Office Staff Contacted
Standard Plans Index	○	◉	
Traffic Engineering Manual	○	◉	
FDOT Design Manual	○	◉	
Construction Project Administration Manual	○	◉	
Basis of Estimate/Pay Items	○	◉	
Structures Design Guidelines	○	◉	
Approved Product List	○	◉	
Materials Manual	○	◉	

Will this revision necessitate any of the following:

Design Bulletin ☐ **Construction Bulletin** ☐ **Estimates Bulletin** ☐ **Materials Bulletin** ☐

Are all references to external publications current? **Yes** ◉ **No** ○

If not, what references need to be updated? (Please include changes in the redline document.)

Why does the existing language need to be changed?

Making changes to help prevent mold formation in equipment shelters.

Summary of the changes:

677-2: Remove language that conflicts with other parts of spec. 677-2.4 and 677-2.5: adding la

Are these changes applicable to all Department jobs? **Yes** ◉ **No** ○
If not, what are the restrictions?

Contact the State Specifications Office for assistance in completing this form.
Dan Hurtado 850-414-4130 dan.hurtado@dot.state.fl.us Debbie Toole 850-414-4114 deborah.toole@dot.state.fl.us
Rebecca Frimmel 850-414-4155 rebecca.frimmel@dot.state.fl.us

Florida Department of Transportation

RON DESANTIS
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

KEVIN J. THIBAULT
SECRETARY

M E M O R A N D U M

DATE: May 23, 2019

TO: Specification Review Distribution List

FROM: Dan Hurtado, P.E., State Specifications Engineer

SUBJECT: Proposed Specification: **6770201 Equipment Shelter**

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification change.

This change was proposed by Derek Vollmer of the State Traffic Engineering Research Lab to modify the language.

Please share this proposal with others within your responsibility. Review comments are due within four weeks and should be sent to Mail Station 75 or online at http://www2.dot.state.fl.us/ProgramManagement/Development/IndustryReview.aspx . Comments received after **June 20, 2019**, may not be considered. Your input is encouraged.

DH/dt
Attachment

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.