

# Florida Department of Transportation

RICK SCOTT **GOVERNOR** 

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### TRAFFIC ENGINEERING & OPERATIONS BULLETIN 12-15 **ROADWAY DESIGN BULLETIN 15-14** DCE MEMORANDUM NO. 24-15

(FHWA Approved: 12/17/2015)

## This Memo has Expired

**DATE:** December 17, 2015

TO: District Directors of Transportation Operations, District Directors of

> Transportation Development, District Design Engineers, District Program Management Engineers/Administrators, District Construction Engineers, District Structures Design Engineers, District Maintenance Engineers, District

Mark Wilson, Director, Traffic Engineering & Operations Office Wilson, Director, Office of Design

David Sadler Director, Office of Design

FROM:

David Sadler, Director, Office of Construction

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Schiess, Trey Tillander, Jeffrey Ger (FHWA), Nick Finch (FHWA), Rafiq Darji

(FHWA), Bob Burleson (FTBA)

**SUBJECT:** Design Standards Index 17727 - Span Wire Traffic Signal Hangers

#### REQUIREMENTS

The following *Design Standards Revision (DSR)* is released:

Revised Index 17727 Sheet 2 of 2, (Signal Cable & Span Wire Installation Details) is released.

#### BACKGROUND

The Department is changing the statewide standard for span wire traffic signal hangers from the Pivotal Adjustable Hanger Assembly (PAHA) to the Tri-Stud Adjustable Hanger Assembly. *Design* Standards, Index 17727 (Signal Cable & Span Wire Installation Details) has been reissued as a DSR requiring a Tri-Stud Adjustable Hanger, Extension Connector, Span Wire Clamp and Messenger Wire Clamp.

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Department funded research is currently underway at the Florida International University Wall of Wind facility in Miami to assess the dynamic performance of span wire traffic signal assemblies in hurricane force winds. Observations from recent wind tests of signal assemblies attached to the span wires with PAHAs revealed a significant oscillating behavior at wind speeds well below the design wind speed. In testing, oscillations progressively increased. Signals attached to the span wires with Tri-Stud Adjustable Hangers did not show any significant oscillating behavior in the tests. Given the low wind speed at which signals oscillated when attached to span wires with PAHAs, the Department is issuing this bulletin as a precautionary measure pending completion of the research.

#### **IMPLEMENTATION**

The use of the **DSR** for Index 17727 is required for:

- All projects let on or prior to December 31, 2015, including those currently under construction where the Pivotal Adjustable Hanger Assemblies have not yet been installed. This Construction Memo serves as a blanket approval to process a contract supplemental agreement or work order.
- All projects with lettings from January 1, 2016 to June 30, 2016. Include the *DSR* for Index 17727 in the back of the component plan set in accordance with the *Plans Preparation Manual, Volume 2, Chapter 3*. Any projects already accepted by Central Office will need a mandatory revision.

For projects let on or after July 1, 2016, the contents of this *DSR* will be effective in the *FY 2016-17 Design Standards eBook*.

#### **CONTACT**

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