Origination Form

Specifications

Name:	Mohab El-Hakim	**Standard Specification Section:**	695
Email:	Mohab.El-Hakim@dot.state.fl.us	**Special Provision:**	
Date:	2026-02-02T16:50:33Z	**Associated Specs:**	None

Summary:

Reduction of cure time of asphalt friction course from 30 to 15 days prior to installation of in-path sensors.

Justification:

The change will speed up the installation of in-path sensors and reduce construction schedules by 15 days.

Do the changes affect other types of specifications?

Neither

List Specifications Affected:

Other Affected Documents/Offices	Contacted	Yes/No
Other Standard Plans		No
Florida Design Manual		No
Structures Manual		No
Basis of Estimates Manual		No
Approved Product List		No
Construction Office		No
Maintenance Office		No
Materials Manual		No
Traffic Engineering Manual		No

Are changes in line with promoting and making progress on improving safety, enhancing mobility, inspiring innovation, and fostering talent; explain how?

Yes. Reduction of cure time of asphalt friction course from 30 to 15 days prior to installation of in-path sensors is a step towards speeding up construction activities and reducing associated traffic delays.

What financial impact does the change have; project costs, pay item structure, or consultant fees?

No impact on project costs, pay item structure or consultant fees.

What impact does the change have on production or construction schedules?

The change reduces the construction schedules by 15 days as the in-path sensors could be installed in the friction course after 15 days only instead of 30 days.

How does this change improve efficiency or quality?

The change improves efficiency by reducing the construction schedules by 15 days as the in-path sensors could be installed in the friction course after 15 days only instead of 30 days.

Which FDOT offices does the change impact?

Construction and Traffic Operations

What is the impact to districts with this change?

This change will reduce construction schedules by 15 days and minimize user delays in work zones.

Does the change shift risk and to who?

There are no additional risks (or changes to risk) associated with these specification changes.

Provide summary and resolution of any outstanding comments from the districts or industry.

Comments and Responses are available on the Track the Status of Revisions hyperlink located on the Specifications landing page: https://www.fdot.gov/programmanagement/Specs.shtm

What is the communication plan?

Through the established specification revision process (e.g., Internal and Industry Review)

What is the schedule for implementation?

The Standard Specifications eBook and Workbook are effective July 1st every year.

TRAFFIC MONITORING SITE EQUIPMENT
(REV 2-2-26)

SUBARTICLE 695-3.2 is deleted and the following substituted:

695-3.2 Axle Sensor:

Section, Contract Documents, and Standard Plans, Index 695-001. Ensure axle sensors are installed in the roadway and secured using an adhesive bonding agent as listed on the APL.

Allow newly applied friction course to cure for a minimum of ~~30~~15 days prior to the installation of in-road sensors.

Install axle sensors in the right-hand wheel-path midway between the leading and trailing loops as detailed in Standard Plans, Index 695-001. Install axles sensors in the left-hand wheel-path when no paved shoulder exists and sensor lead exit windows are installed at the right-hand edge of the roadway surface or in a lane which is to the left of and adjacent to an open lane of traffic.

Install the axle sensor such that the cable end is closest to the pull box to which the sensor lead cable will be routed. Install the end of the sensor mid-way into the edge line stripe or lane line stripe. Ensure that the axle sensor being installed has lead-in cables of sufficient length to reach the cabinet without splicing. Do not splice axle sensor lead-in cables.

Route the sensor leads to the pull box then to the TMS cabinet. Mark the sensor leads at the pull box and at termination in the cabinet. Submit lane numbering information as specified in Standard Plans, Index 695-001.

Cut the slot the length of the sensor plus an additional 3 to 4 inches. Ensure the depth and width of the slot is installed as recommended by the sensor manufacturer, typically 0.75 inch wide by 1.5 to 2 inches deep.

Use clips or jigs provided by the manufacturer to suspend the sensor at a uniform depth in the slot. Mix and apply the adhesive bonding agent ensuring the slot is completely full with no voids beneath the sensor.

695-3.2.1 Test Requirements: Perform the manufacturer's recommended on-site pre-installation test to determine the sensor's condition using an Inductive Capacitance Resistance meter. Replace any sensors that fail the pre-installation test.

Record all test results by lane on the warranty form provided by the manufacturer and leave a copy in the cabinet.

Repeat the test at the termination point in the cabinet after installation. Use an oscilloscope to view and record typical waveforms and signal intensity measurements for the axles of passenger cars and large trucks. Remove and replace any sensor that fails the test at no additional charge to the Department.

Perform an operational test to meet final acceptance requirements. The operational test requires the equipment to operate without deficiencies for a minimum of 14 days prior to final acceptance and must provide a minimum of 200 mv reading for a FHWA Class II vehicle. The sensor shall be operating without deficiencies at the time of final acceptance. Remove and replace any sensor that fails the operation test at no additional charge to the Department. Final inspection will be completed by FDOT TDA staff for final acceptance.

SUBARTICLE 695-8.2.1 is deleted and the following substituted:

695-8.2.1 Installation Requirements: Allow newly applied friction course to cure for a minimum of ~~30~~15 days prior to the installation of in-path sensors.

Ensure axle sensors are installed in the pathway and secured using an adhesive bonding agent as listed on the APL.

Cut the slot the length of the axle sensor plus an additional 3 to 4 inches. Ensure the depth and width of the slot is installed as recommended by the sensor manufacturer. Ensure that all saw cuts are free of any dust, dirt, or other debris and completely dry prior to the installation.

Use clips or jigs provided by the manufacturer to suspend the sensor at a uniform depth in the slot. Mix and apply the adhesive bonding agent ensuring the slot is completely full with no voids beneath the sensor. Once cured, grind down excess adhesive bonding agent to be level with the road surface, sidewalk, side path, or shared-use path.