Florida Department of Transportation

JEB BUSH
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

DENVER J. STUTLER, JR.
SECRETARY

November 7, 2005

Mr. Donald Davis
Program Operations Engineer
Federal Highway Administration
545 John Knox Road, Suite 200
Tallahassee, Florida 32303

Re: Office of Design, Specifications
Section 416
Proposed Specification: 4160601 – Testing of Anchors Or Dowels - Field Testing.

Dear Mr. Davis:

We are submitting, for your approval, two copies of a proposed Supplemental Specification for Testing of Anchors Or Dowels - Field Testing.

This change was proposed by Steve Plotkin of the State Construction Office to decrease the sampling rate from 10 % to 4 % for anchors and dowels, per LOT.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via Email to SP965DB or duane.brautigam@dot.state.fl.us.

If you have any questions relating to this specification change, please call Duane F. Brautigam, State Specifications Engineer at 414-4110.

Sincerely,

Signature On File

Duane F. Brautigam, P.E.
State Specifications Engineer

DFB/jo
Attachment
cc: General Counsel
Florida Transportation Builders' Assoc.
State Construction Engineer

TESTING OF ANCHORS OR DOWELS.
(REV ~~8-25-05~~*11-1-05*)

SUBARTICLE 6.1 (Pages 385-386) are deleted and the following substituted:

416-6.1 Field Testing: Provide a qualified professional Independent Testing Agency to perform field testing of the installed anchors and dowels in accordance with the applicable sections of ASTM E 488 and ASTM E 1512, in the presence of the Engineer. Perform restrained static tension tests to prevent damage to the surrounding concrete. Displacement measurement for field testing is not required. Test individual anchors and dowels by proof loading in tension to 85% of the Specified Bond Strength in Section 937, based on the nominal anchor or dowel diameter and embedment depth, but not more than 90% of the yield strength of the anchor or dowel.

Divide the anchors and dowels into LOTs for testing and acceptance. Each LOT must contain a maximum of 100 anchors or dowels, of the same diameter, embedment length and Adhesive Bonding Material System. Randomly select ~~10%~~*~~4%~~four* of the anchors and dowels in each LOT for testing, ~~with a minimum of five tests per LOT~~ *except if there are three or less in the LOT, in which case, test all anchors*, unless otherwise directed by the Engineer. *If three consecutive LOTs have no failing tests, sample the next three LOTs at a 2% rate and if these LOTs have no failing tests, sample at a rate of 1% for the remaining LOTs unless there is a failure; however, regardless of LOT size, sample at less one dowel per LOT.* For every failed field test, perform two additional field tests on adjacent untested anchors or dowels within the LOT. Continue additional field tests until no more test failures occur, or all anchors and dowels within the LOT are tested. *For the next LOT after a failed LOT, the sampling rate must be 4% but not less than one dowel per LOT and conform to the sampling rate procedure above including rate reductions as appropriate.* Determine failure of the field test in accordance with ASTM E 488. Submit certified test reports from the Independent Testing Agency to the Engineer for each LOT.

TESTING OF ANCHORS OR DOWELS.
(REV 11-1-05)

SUBARTICLE 6.1 (Pages 385-386) are deleted and the following substituted:

416-6.1 Field Testing: Provide a qualified professional Independent Testing Agency to perform field testing of the installed anchors and dowels in accordance with the applicable sections of ASTM E 488 and ASTM E 1512, in the presence of the Engineer. Perform restrained static tension tests to prevent damage to the surrounding concrete. Displacement measurement for field testing is not required. Test individual anchors and dowels by proof loading in tension to 85% of the Specified Bond Strength in Section 937, based on the nominal anchor or dowel diameter and embedment depth, but not more than 90% of the yield strength of the anchor or dowel.

Divide the anchors and dowels into LOTs for testing and acceptance. Each LOT must contain a maximum of 100 anchors or dowels, of the same diameter, embedment length and Adhesive Bonding Material System. Randomly select four of the anchors and dowels in each LOT for testing, except if there are three or less in the LOT, in which case, test all anchors, unless otherwise directed by the Engineer. If three consecutive LOTs have no failing tests, sample the next three LOTs at a 2% rate and if these LOTs have no failing tests, sample at a rate of 1% for the remaining LOTs unless there is a failure; however, regardless of LOT size, sample at less one dowel per LOT. For every failed field test, perform two additional field tests on adjacent untested anchors or dowels within the LOT. Continue additional field tests until no more test failures occur, or all anchors and dowels within the LOT are tested. For the next LOT after a failed LOT, the sampling rate must be 4% but not less than one dowel per LOT and conform to the sampling rate procedure above including rate reductions as appropriate. Determine failure of the field test in accordance with ASTM E 488. Submit certified test reports from the Independent Testing Agency to the Engineer for each LOT.