Florida Department of Transportation

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RACHEL D. CONE
INTERIM SECRETARY

May 10, 2017

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

Re: State Specifications Office
Section: **346**
Proposed Specification: **3460500 Portland Cement Concrete.**

Dear Mr. Nguyen:

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

The changes are proposed by Jose Armenteros of the State Materials Office (SMO) to modify the language for consistency with proposed revisions to Materials Manual Section 8.4, Volume II.

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

If you have any questions relating to this specification change, please call me at 414-4130.

Sincerely,

Signature on file

Dan Hurtado, P.E.
State Specifications Engineer

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

**PORTLAND CEMENT CONCRETE.**

**(REV ~~3-20-17~~4-4-~~17~~5-10-17)**

ARTICLE 346-5 is deleted and the following substituted:

**346-5 Sampling and Testing Methods.**

Perform concrete sampling and testing in accordance with the following methods:

| TABLE 5 | |
|---|---|
| Description | Method |
| Slump of Hydraulic Cement Concrete | ASTM C143 |
| Air Content of Freshly Mixed Concrete by the Pressure Method* | ASTM C231 |
| Air Content of Freshly Mixed Concrete by the Volumetric Method* | ASTM C173 |
| Making and Curing Test Specimens in the Field** | ASTM C31 |
| Compressive Strength of Cylindrical Concrete Specimens*** | ASTM C39 |
| Obtaining and Testing Drilled Core and Sawed Beams of Concrete | ASTM C42 |
| Initial Sampling of Concrete from Revolving Drum Truck Mixers or Agitators | FM 5-501 |
| Low Levels of Chloride in Concrete and Raw Materials | FM 5-516 |
| Density (Unit Weight), Yield and Air Content (Gravimetric) of Concrete | ASTM C138 |
| Temperature of Freshly Mixed Portland Cement Concrete | ASTM C1064 |
| Sampling Freshly Mixed Concrete**** | ASTM C172 |
| Static Segregation of Self-Consolidating Concrete using Column Techniques | ASTM C1610 |
| Slump Flow of Self-Consolidating Concrete | ASTM C1611 |
| Relative Viscosity of Self-Consolidating Concrete | ASTM C1611 |
| Visual Stability Index of Self-Consolidating Concrete | ASTM C1611 |
| Passing Ability of Self-Consolidating Concrete by J-Ring | ASTM C1621 |
| Rapid Assessment of Static Segregation Resistance of Self-Consolidating Concrete Using Penetration Test | ASTM C16712 |
| Aggregate Distribution of Hardened Self-Consolidating Concrete | FM 5-617 |
| Hardened Visual Stability Index of Self-Consolidating Concrete | FM 5-615 |
| Fabricating Test Specimens with Self-Consolidating Concrete | ASTM C1758 |
| Concrete Resistivity as an Electrical Indicator of its Permeability | AASHTO T358 |

*The Department will use the same type of meter for Verification testing as used for QC testing. When using pressure type meters, use an aggregate correction factor determined by the concrete producer for each mix design to be tested. Record and certify test results for correction factors for each type of aggregate at the concrete production facility.

** Provide curing facilities that have the capacity to store all QC, Verification, "hold" and Independent Verification cylinders simultaneously for the initial curing. Cylinders will be delivered to the testing laboratory in their molds. The laboratory will remove the specimens from the molds and begin final curing.

***The Verification technician will use the same size cylinders as the Quality Control technician.

**** Take the test sample from the middle portion of the batch in lieu of collecting and compositing samples from two or more portions, as described in ASTM C172.

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