

ORIGINATION FORM

Date: **05/16/2014**

Originator: **Dan Hurtado**

Contact Information: **(850) 414-4155 dan.hurtado@dot.state.fl.us**

Specification Title: **Concrete Structures**

Specification Section, Article, or Subarticle Number: **400-16.4 and 400-16.7**

Why does the existing language need to be changed? **Specification for water (Section 923) already referenced at beginning of Section 400. Water does not need to be potable.**

Summary of the changes: **Removed word “potable”.**

Are these changes applicable to all Department jobs? **Yes**

If not, what are the restrictions? **N/A**

Will these changes result in an increase or decrease in project costs? **No**

If yes, what is the estimated change in costs?

With who have you discussed these changes? **Concrete Materials Technical Advisory Group**

What other offices will be impacted by these changes? **None**

Are changes needed to the PPM, Design Standards, SDG, CPAM or other manual? **No**

Are all references to external publications current? **N/A**

If not, what references need to be updated (please include changes in the redline)? **N/A**

Is a Design Bulletin, Construction Memo, or Estimates Bulletin needed? **No**

Contact the State Specifications Office for assistance in completing this form.

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ANANTH PRASAD, P.E.
SECRETARY

MEMORANDUM

DATE: June 3, 2014
TO: Specification Review Distribution List
FROM: Daniel Scheer, P.E., State Specifications Engineer
SUBJECT: Proposed Specification: 4001604 Concrete Structures – Bridge Decks

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

The changes are proposed by Dan Hurtado of the State Construction Office to remove unnecessary 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 to my attention via e-mail at SP965DS, or daniel.scheer@dot.state.fl.us. Comments received after **July 1, 2014**, may not be considered. Your input is encouraged.

DS/ft
Attachment

CONCRETE STRUCTURES – BRIDGE DECKS.
(REV 5-16-14)

SUBARTICLE 400-16.4 is deleted and the following substituted:

400-16.4 Bridge Decks: Cure bridge decks for a duration of seven days. Apply a membrane curing compound to the deck top surface in accordance with 400-16.2 using a compressor driven sprayer. In general, apply curing compound to a concrete deck when the surface is damp and after all pooled water has evaporated. For Short bridges, begin applying curing compound immediately after the initially placed concrete has been floated, straightedged, textured and a damp surface condition exists and continue applying compound as concrete placement progresses with as little interruption as possible until the entire deck surface has been coated with compound. For Long bridges, begin applying curing compound to the initially placed concrete as soon as a damp surface condition exists and continue applying compound as concrete placement progresses with as little interruption as possible until the entire deck surface has been coated with compound. However, for both Short and Long bridges, the elapsed time between the initial placement of deck concrete and the completed application of curing compound must not exceed 120 minutes. The 120 minute limit may be extended by the Engineer if project specific factors (cool temperatures, high humidity, retarding admixtures, etc.) are prolonging wet surface conditions.

Prior to the first deck placement, submit to the Engineer the method that will be used to periodically measure the rate of application of curing compound in, gallons/sq ft as the deck placement progresses. Prior to the placement of each deck, submit to the Engineer the anticipated quantity of curing compound in gallons along with the corresponding square feet of deck to be covered to meet the coverage rate in 400-16.2. Compute the actual quantity of curing compound applied at the conclusion of each deck placement and submit the quantity to the Engineer. Apply the curing compound from a work platform.

Place curing blankets on all exposed surfaces which are not formed as soon as possible with minimal effect on the surface texture. Place the curing blankets with sufficient overlapping seams to form an effective moisture seal. Before using curing blankets, mend tears, splits, or other damage that would make them unsuitable. Discard curing blankets that are not repairable. Wet all curing blankets immediately after satisfactorily placing them and maintain them in a saturated condition throughout the seven day curing period. Supply sufficient quantity of ~~potable~~ water at the job site for wetting the blankets.

Where a bridge deck slab is to be subjected to walking, wheeling or other approved construction traffic within the seven day curing period, protect the curing blankets and the slab surface from damage by placing wooden sheeting, plywood or other approved protective material in the travel areas.

When the ends of the curing blankets are rolled back to permit screeding of adjacent bridge deck slabs, keep the exposed surfaces wet throughout the period of exposure.

Removal of bottom and side forms after 72 hours is acceptable upon compliance with 400-14. Apply membrane curing compound to all surfaces stripped of forms within one hour of loosening. Apply curing compound according to 400-16.2.

SUBARTICLE 400-16.7 is deleted and the following substituted:

400-16.7 Removal of Membrane Curing Compounds: Provide the longest possible curing duration; however, remove curing compound on portions of members to be bonded to other concrete. Compounds may be removed by either sand or water blasting. Water blasting requires the use of ~~potable water and~~ a minimum nozzle pressure of 2,900 psi.