



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

ANANTH PRASAD, P.E.
SECRETARY

July 10, 2013

Monica Gourdine
Program Operations Engineer
Federal Highway Administration
545 John Knox Road, Suite 200
Tallahassee, Florida 32303

Re: State Specifications and Estimates Office
Section **400**
Proposed Specification: **4001501 Concrete Structures.**

Dear Ms. Gourdine:

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

These changes were proposed by Steve Plotkin of the State Construction Office to update the language for current Department practice for surface finishing of concrete.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via email to SP965DS or daniel.scheer@dot.state.fl.us.

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

Sincerely,

Signature on file

Daniel Scheer, P.E.
State Specifications Engineer

DS/dt

Attachment

cc: Florida Transportation Builders' Assoc.
State Construction Engineer

CONCRETE STRUCTURES.

(REV ~~5-307-10-13~~)

SUBARTICLE 400-15.1 (Pages 376 – 377) is deleted and the following substituted:

400-15.1 General Surface Finish (Required for All Surfaces): After placing and consolidating the concrete, strike-off all exposed surfaces to the lines and grades indicated in the plans in a manner that will leave a surface of uniform texture free of undesirable surface irregularities, cavities, and other defects. Cut back metal ties supporting reinforcement, conduit, and other appurtenances a minimum of 1 inch from finished surface. After removing excess mortar and concrete and while the concrete is still in a workable state, carefully tool all construction and expansion joints. Leave joint filler exposed for its full length with clean edges. Ensure that finished work in addition to that specified above is compatible and complementary to the class of surface finish required.

Remove all laitance, loose material, form oil and curing compound ~~Remove~~ from exposed surfaces that do not require forming and from exposed surfaces requiring forming, after form removal;. ~~Immediately after removing forms from any exposed concrete surface, remove all laitance, loose material, form oil and curing compound, and r~~Remove fins and irregular projections flush with the surface. Clean, saturate with water, and ~~fill~~point all holes, tie cavities, honeycomb, chips and spalls. ~~with~~ Prior to filling, prepare the surface to ensure that patching mortar will bond to the existing concrete. Exercise care during the roughening process to prevent excessive defacement and damage to the surface of the existing concrete. Use patching mortar blended from the mix ingredients of the existing concrete. ~~which must~~Ensure the patching mortar closely matches the color of the existing concrete ~~once~~when fully cured.~~an approved high strength, non-metallic, non-shrink grout meeting the requirements of Section 934, mixed and applied in accordance with the manufacturer's recommendations. Exercise care during the roughening process to prevent additional defacement and damage to the formed surface. As A~~an alternative, mortar consisting of the following materials may be used ~~that consists of a blend of the following materials:~~ 4 parts of ordinary gray portland cement, 1/2 part of white portland cement, 1 part of fly ash and 2 to 4 parts of sand. The blended mortar must closely match the color of the filled element once fully cured and the proportion of white portland cement may be adjusted to achieve as close a match as possible. Regardless of the type patching mortar used, provide a mortar surface ~~that has smoothness and texture~~ closely resembling the existing surface.

Cure the newly placed mortar using a curing blanket or a Type I clear curing compound in accordance with 400-16.

In the event unsatisfactory surfaces are obtained, repair these surfaces by methods approved by the Engineer or the affected concrete will be rejected. Repair any surface or remove rejected concrete at no expense to the Department.

CONCRETE STRUCTURES.**(REV 7-10-13)**

SUBARTICLE 400-15.1 (Pages 376 – 377) is deleted and the following substituted:

400-15.1 General Surface Finish (Required for All Surfaces): After placing and consolidating the concrete, strike-off all exposed surfaces to the lines and grades indicated in the plans in a manner that will leave a surface of uniform texture free of undesirable surface irregularities, cavities, and other defects. Cut back metal ties supporting reinforcement, conduit, and other appurtenances a minimum of 1 inch from finished surface. After removing excess mortar and concrete and while the concrete is still in a workable state, carefully tool all construction and expansion joints. Leave joint filler exposed for its full length with clean edges. Ensure that finished work in addition to that specified above is compatible and complementary to the class of surface finish required.

Remove all laitance, loose material, form oil and curing compound from exposed surfaces that do not require forming and from exposed surfaces requiring forming, after form removal. Remove fins and irregular projections flush with the surface. Clean, saturate with water, and fill all holes, tie cavities, honeycomb, chips and spalls. Prior to filling, prepare the surface to ensure that patching mortar will bond to the existing concrete. Exercise care during the roughening process to prevent excessive defacement and damage to the surface of the existing concrete. Use patching mortar blended from the mix ingredients of the existing concrete. Ensure the patching mortar closely matches the color of the existing concrete when fully cured. As an alternative, mortar consisting of the following materials may be used: 4 parts of ordinary gray portland cement, 1/2 part of white portland cement, 1 part of fly ash and 2 to 4 parts of sand. The blended mortar must closely match the color of the filled element once fully cured and the proportion of white portland cement may be adjusted to achieve as close a match as possible. Regardless of the type patching mortar used, provide a mortar surface closely resembling the existing surface.

Cure the newly placed mortar using a curing blanket or a Type I clear curing compound in accordance with 400-16.

In the event unsatisfactory surfaces are obtained, repair these surfaces by methods approved by the Engineer or the affected concrete will be rejected. Repair any surface or remove rejected concrete at no expense to the Department.