



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

ANANTH PRASAD, P.E.
SECRETARY

December 5, 2011

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

Re: Office of Design, Specifications
Section **410**
Proposed Specification: **4100601 Precast Concrete Box Culvert.**

Dear Ms. Gourdine:

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

These changes are proposed by Andre Pavlov of the State Structures Design Office to require a continuous underdrain for all box culverts.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via Email to SP965RP or rudy.powell@dot.state.fl.us.

If you have any questions relating to this specification change, please call Rudy Powell, State Specifications Engineer at 414-4280.

Sincerely,

Rudy Powell, Jr., P.E.
State Specifications Engineer

RP/cah

Attachment

cc: Calvin Johnson, Chief Civil Litigation
Florida Transportation Builders' Assoc.
State Construction Engineer

PRECAST CONCRETE BOX CULVERT.**(REV ~~6-8-10~~~~129-522-11~~)-(FA ~~7-29-10~~)-(1-11)**

SUBARTICLE 410-6.1 (of the Supplemental Specification) is deleted and the following substituted:

410-6.1 Casting: Cast precast elements in unyielding beds and forms. Ensure bearing surfaces in casting forms are level and straight, and vertical surfaces are plumb prior to casting. Ensure surfaces within the forms against which concrete will be cast, are clean and free from rust and hardened residual concrete. Provide full concrete cover clearance to all form wires and other miscellaneous pieces of metal, except as permitted by Section 415. Bend all tie wires away from the form surface to provide maximum concrete cover. Provide inserts and lifting devices in accordance with 450-9.2.1. ~~When weep holes are shown in the Plans, provide 3-inch minimum diameter holes, symmetrically, one on each side per section, and 6 inches above the interior floor slab.~~

ARTICLE 410-10 (Pages 421 – 422) is expanded by the following new Subarticle:

410-10.6 Underdrain and Weep Holes: *Provide a continuous underdrain in accordance with Design Standard Index No. 289. ~~When weep holes are provided, cover the exterior opening of all weep holes with galvanized wire mesh and a minimum of 2 cubic feet of clean broken stone or gravel wrapped in Type D-3 filter fabric, to allow free drainage but prevent the fill from washing through.~~*

PRECAST CONCRETE BOX CULVERT.**(REV 12-5-11)**

SUBARTICLE 410-6.1 (of the Supplemental Specification) is deleted and the following substituted:

410-6.1 Casting: Cast precast elements in unyielding beds and forms. Ensure bearing surfaces in casting forms are level and straight, and vertical surfaces are plumb prior to casting. Ensure surfaces within the forms against which concrete will be cast, are clean and free from rust and hardened residual concrete. Provide full concrete cover clearance to all form wires and other miscellaneous pieces of metal, except as permitted by Section 415. Bend all tie wires away from the form surface to provide maximum concrete cover. Provide inserts and lifting devices in accordance with 450-9.2.1.

ARTICLE 410-10 (Pages 421 – 422) is expanded by the following new Subarticle:

410-10.6 Underdrain and Weep Holes: Provide a continuous underdrain in accordance with Design Standard Index No. 289.