



Florida Department of Transportation

CHARLIE CRIST
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

STEPHANIE KOPELOUSOS
SECRETARY

January 15, 2007

Dr. Leslie McCarthy, PhD, P.E.
Program Operations Engineer
Federal Highway Administration
545 John Knox Road, Suite 200
Tallahassee, Florida 32303

Re: Office of Design, Specifications
Section 462
Proposed Specification: 4620425- Post Tensioning-Steel Pipes

Dear Dr. McCarthy:

We are submitting, for your approval, two copies of a proposed Supplemental Specification for Post Tensioning-Steel Pipes.

This change was proposed by Charles Boyd of the State Structures Office to remove the requirements for a shear transfer mechanism and delete the testing and certification requirements.

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/dm
Attachment

cc: Gregory Jones, General Counsel
Florida Transportation Builders' Assoc.
State Construction Engineer

POST-TENSIONING STEEL PIPES.
(REV 10/31/07)

SUBARTICLE 462-4.2.5.4 (Page 567) is deleted and the following substituted:

462-4.2.5.4 Steel Pipes: Use galvanized schedule 40 steel pipes where shown in the plans and in all deviation blocks *and diaphragms*. ~~Ensure that steel pipes used in the tendon anchorage zones are equipped with a shear transfer mechanism. Test and provide written certification that the shear transfer mechanism can resist at least 68% of the tendon GUTS in a shear transfer pull-out test described below:~~

~~Shear Transfer Mechanism Pullout Test Procedure:~~

- ~~1) Cast Anchorage, Shear Transfer Mechanism and Duct in a test block of concrete with minimum dimensions of 2' 6" X 2' 6" X Required Diaphragm Length (6 ft. min.)~~
- ~~2) Stress tendon to 80% GUTS. Grout tendon.~~
- ~~3) Transfer force from wedge plate to shear transfer mechanism. Alternate procedures to safely obtain the required resistance force for the shear transfer mechanism may be used.~~
- ~~4) Measure tendon release force. (Must be greater than 68% of tendon GUTS).~~
- ~~5) Remove shim plates from behind anchor head and transfer tendon force through grout/shear transfer mechanism into test block.~~
- ~~6) Record lowest transfer force measured over a sustained period of one hour.~~

POST-TENSIONING STEEL PIPES.
(REV 10/31/07)

SUBARTICLE 462-4.2.5.4 (Page 567) is deleted and the following substituted:

462-4.2.5.4 Steel Pipes: Use galvanized schedule 40 steel pipes where shown in the plans and in all deviation blocks and diaphragms.