Florida Department of Transportation

**RICK SCOTT**
**GOVERNOR**

605 Suwannee Street
Tallahassee, FL 32399-0450

**STEPHANIE KOPELOUSOS**
**SECRETARY**

January 4, 2011

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

Re: Office of Design, Specifications
Section 630
Proposed Specification: 6300301 Conduit – Fiber Optic Cable Locate Wire

Dear Ms. Gourdine:

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

These changes are proposed by Chester Henson to clarify that the Contractor is to bury a locate wire with the conduit. The statement "as shown in the plans, or as directed by the Engineer" has been removed.

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,

Signature on File

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

RP/ft
Attachment
cc: Gregory Jones, Chief Civil Litigation
Florida Transportation Builders' Assoc.
State Construction Engineer

**CONDUIT – FIBER OPTIC CABLE LOCATE WIRE.**
**(REV ~~7-15-10~~*11-22-10*)**

SUBARTICLE 630-3.1.2 (Pages 739 - 740) is deleted and the following substituted:

**630-3.1.2 Fiber Optic Cable Locate Wire:** *Install locate wire in the trench or bore with all underground conduits to provide end-to-end electrical continuity for electronically locating the underground conduit system.*

*For direct burial conduit or trench, b*~~B~~ury locate wire along the centerline of the top outer surface of installed conduit~~, as shown in the plans, or as directed by the Engineer~~. *Install the locate wire no more than 3 inches above the conduit.*

*For bored conduit, place locate wire within its own inner duct or use conduit with integral locate wire.*

~~Install locate wire in the trench or bore with all underground conduits to provide end-to-end electrical continuity for electronically locating the underground conduit system. Do not install locate wire in a conduit with fiber optic cable.~~*~~For direct bore or where locate wire is to be inside the duct, the locate wire shall be enclosed within an inner duct.~~*

~~Do not run locate wires into field cabinets. Terminate locate wires at the first and last pull boxes in the conduit run or as shown in the plans. Ensure that wire termination occurs only at the top of a pull box.~~

~~In a trenching operation, install the locate wire no more than 3 inches above the conduit. Ensure that the locate wire enters all pull boxes and splice boxes, and that a minimum of 10 feet of slack locate wire is coiled and neatly stored in each box.~~

~~In a boring operation, install the locate wire in an encasement.~~

*Ensure that the locate wire enters all pull boxes and splice boxes, and that a minimum of 10 feet of slack locate wire is coiled and neatly stored in each box. Drill a hole in the pull box or splice box for wire entry. Fill any gaps between the locate wire and the hole it passes through with non-shrink grout or a similar sealant suitable for the application and approved by the Engineer.*

*Do not run locate wires into field cabinets. Terminate locate wires at the first and last pull boxes in the conduit run. Ensure that wire termination occurs only at the top of a pull box.* ~~Drill a hole in the pull box or splice box for wire entry as shown in the plans. Fill any gaps between the locate wire and the hole it passes through with non-shrink grout or a similar sealant suitable for the application and approved by the Engineer.~~

Perform continuity tests and insulation resistance tests on all locate wires. Provide the Engineer with all test results. Replace or repair defective locate wire at no additional cost.

Make locate wire splices in a flush grade-level box. Ensure that locate wire splices are waterproof and suitable for direct burial. Ensure that locate wire splices at the pull box meet NEC requirements. Ensure that locate wire splices include a mechanical crimp connection with a butt sleeve, an oxide-preventing aerosol lacquer, mastic electrical splicing tape, and standard electrical tape using methods and materials

approved by the Engineer. At the completion of the installation, provide the Engineer with as-built drawings that document all splice locations.

**CONDUIT – FIBER OPTIC CABLE LOCATE WIRE.**
**(REV 11-22-10)**

SUBARTICLE 630-3.1.2 (Pages 739 - 740) is deleted and the following substituted:

**630-3.1.2 Fiber Optic Cable Locate Wire:** Install locate wire in the trench or bore with all underground conduits to provide end-to-end electrical continuity for electronically locating the underground conduit system.

For direct burial conduit or trench, bury locate wire along the centerline of the top outer surface of installed conduit. Install the locate wire no more than 3 inches above the conduit.

For bored conduit, place locate wire within its own inner duct or use conduit with integral locate wire.

Ensure that the locate wire enters all pull boxes and splice boxes, and that a minimum of 10 feet of slack locate wire is coiled and neatly stored in each box. Drill a hole in the pull box or splice box for wire entry. Fill any gaps between the locate wire and the hole it passes through with non-shrink grout or a similar sealant suitable for the application and approved by the Engineer.

Do not run locate wires into field cabinets. Terminate locate wires at the first and last pull boxes in the conduit run. Ensure that wire termination occurs only at the top of a pull box.

Perform continuity tests and insulation resistance tests on all locate wires. Provide the Engineer with all test results. Replace or repair defective locate wire at no additional cost.

Make locate wire splices in a flush grade-level box. Ensure that locate wire splices are waterproof and suitable for direct burial. Ensure that locate wire splices at the pull box meet NEC requirements. Ensure that locate wire splices include a mechanical crimp connection with a butt sleeve, an oxide-preventing aerosol lacquer, mastic electrical splicing tape, and standard electrical tape using methods and materials approved by the Engineer. At the completion of the installation, provide the Engineer with as-built drawings that document all splice locations.