ORIGINATION FORM

Date: 11/13/2013 Originator: Mario Paredes Contact Information: 352-955-6690

<u>Specification Title</u>: **Pipe Culverts and pipe liner** <u>Specification Section, Article, or Subarticle Number</u>: **430**, **431**, **and 948**

Why does the existing language need to be changed? Update and add plastic pipes and liners.

<u>Summary of the changes</u>: **Rewrite of liner requirements. Update requirements of polypropylene pipe to new AASHTO method. Add steel reinforced HDPE pipe.**

Are these changes applicable to all Department jobs? Yes If not, what are the restrictions?

Will these changes result in an increase or decrease in project costs? No change If yes, what is the estimated change in costs?

With who have you discussed these changes? Drainage and construction.

What other offices will be impacted by these changes? Maintenance

<u>Are changes needed to the PPM, Design Standards, SDG, CPAM or other manual?</u> The optional pipe handbook needs to allow the use of steel reinforced HDPE pipe.

<u>Are all references to external publications current</u>? No external references <u>If not, what references need to be updated (please include changes in the redline)</u>?

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

Contact the State Specifications Office for assistance in completing this form. Daniel Scheer 850-414-4130 <u>daniel.scheer@dot.state.fl.us</u> Frances Thomas 850-414-4101 <u>frances.thomas@dot.state.fl.us</u> Debbie Toole 850-414-4114 <u>deborah.toole@dot.state.fl.us</u> Andy Harper 850-414-4127 <u>clifton.harper@dot.state.fl.us</u> Ray Haverty 850-414-4129 ray.haverty@dot.state.fl.us



Florida Department of Transportation

RICK SCOTT GOVERNOR 605 Suwannee Street Tallahassee, FL 32399-0450 ANANTH PRASAD, P.E. SECRETARY

MEMORANDUM

DATE: December 10, 2013

TO: Specification Review Distribution List

FROM: Daniel Scheer, P.E., State Specifications Engineer

SUBJECT: Proposed Specification: 4300201 Pipe Culverts.

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

This change was proposed by Mario Paredes of the State Materials Office to update the language for current Department and Industry practice.

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 **January 7, 2014**, may not be considered. Your input is encouraged.

DS/dt Attachment

PIPE CULVERTS. (REV 11-14-13)

SUBARTICLE 430-2.1 is deleted and the following substituted:

430-2.1 Pipe: Meet the following requirements:

Concrete Pipe	Section 449
Round Rubber Gaskets	Section 942
Corrugated Steel Pipe and Pipe Arch	Section 943
Corrugated Aluminum Pipe and Pipe Arch	Section 945
Corrugated Polyethylene Pipe	Section 948
Steel Reinforced Polyethylene Ribbed Pipe	Section 948
Polyvinyl Chloride (PVC) Pipe	Section 948
Fiberglass Reinforced Polymer Pipe	Section 948
Polypropylene Pipe	Section 948

ARTICLE 460-9 is deleted and the following substituted:

430-9 Specific Requirements for *Steel Reinforced Polyethylene Ribbed Pipe*, Corrugated Polyethylene Pipe, Polypropylene Pipe, and Polyvinyl Chloride (PVC) Pipe.

430-9.1 Field Joints: Use gasketed joints to seal side drain, and storm and cross drain. Use gaskets meeting the requirements of Section 449. Ensure that the pipe manufacturer provides a joint design approved by the Engineer before use.

430-9.2 Installation Requirements Including Trenching, Foundation and Backfilling Operations: Check structure shape regularly during backfilling to verify acceptability of the construction method used.

Replace pipe deflected 5% or more of the certified actual mean diameter of the pipe at final inspection at no cost to the Department.