

ORIGINATION FORM

Date: **March 20th, 2014**

Originator: **Chase C. Knight**

Contact Information: **State Materials Office, 352-955-6642, chase.knight@dot.state.fl.us**

Specification Title: **Pipe Culverts**

Specification Section, Article, or Sub-article Number: **430**

Why does the existing language need to be changed? **Change needed to section for clarification to project personnel and is consistent with other structure requirements referred to in Section 105. Liner Repair Systems added for repair options to existing structures. Corrugated Polypropylene Pipe added to reflect recent approval.**

Summary of the changes: **Additional verbiage added to section to clarify selecting and obtaining a pipe producer. Reference to 948 Liner Repair Systems added. Corrugated Polypropylene Pipe added to materials.**

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**

If yes, what is the estimated change in costs?

With who have you discussed these changes? **Mario Paredes, Greg Weich**

What other offices will be impacted by these changes? **Construction, Drainage**

Are changes needed to the PPM, Design Standards, SDG, CPAM or other manual? **Not at this time**

Are all references to external publications current? **Yes**

If not, what references need to be updated (please include changes in the redline)?

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

Contact the State Specifications Office for assistance in completing this form.

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ANANTH PRASAD, P.E.
SECRETARY

MEMORANDUM

DATE: May 30, 2014
TO: Specification Review Distribution List
FROM: Daniel Scheer, P.E., State Specifications Engineer
SUBJECT: Proposed Specification: **4300100 Pipe Culverts.**

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

This change was proposed by Chase Knight of the Department's State Materials Office (SMO) to update the language for consistency with other sections regarding certification requirements for structures, add corrugated polypropylene pipe and liner repair systems to 430-2.1, and for formatting.

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 **June 27, 2014**, may not be considered. Your input is encouraged.

DS/dt
Attachment

PIPE CULVERTS.

(REV ~~4-1-14~~*5-12-14*)

SUBARTICLE 430-1 is deleted and the following substituted:

430-1 Description.

Furnish and install drainage pipe and end sections at the locations called for in the Plans. Furnish and construct joints and connections to existing pipes, catch basins, inlets, manholes, walls, etc., as may be required to complete the work.

Meet the requirements of 449-1.

Construct structural plate pipe culverts or underdrains in accordance with Sections 435 and 440.

For pipe culverts installed by jack & bore, install in accordance with Section 556.

~~Obtain pipe culverts from a Pproducer currently on the Department's list of Producers with Accepted Quality Control Programs. Producers seeking inclusion on the list shall meet the requirements of 105-3.~~

~~When the producer's Quality Control Program is suspended, accept responsibility of either obtaining drainage products from another producer with an accepted Quality Control Program or await re-approval of the producer's Quality Control Program. The Engineer will not allow changes in Contract Time or completion dates as a result of the producer's Quality Control Program suspension. Accept responsibility for all delay costs or other costs associated with the producer's Quality Control Program suspension.~~

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
<i>Corrugated Polypropylene Pipe</i>	<i>Section 948</i>
<i>Corrugated Polyvinyl Chloride (PVC) Pipe.....</i>	<i>Section 948</i>
Fiberglass Reinforced Polymer Pipe.....	Section 948
Polypropylene Pipe	Section 948
<i>Liner Repair Systems</i>	<i>Section 948</i>

SUBARTICLE 430-4.8.1 is deleted and the following substituted:

430-4.8.1 Video Report: Provide a high quality DVD in a MPEG2 format video with a standard resolution of 720 x 480. Use a camera with lighting suitable to allow a clear picture of the entire periphery of the pipe. Center the camera in the pipe both vertically and horizontally and be able to pan and tilt to a 90 degree angle with the axis of the pipe and rotating

360 degrees. Use equipment to move the camera through the pipe that will not obstruct the camera's view or interfere with proper documentation of the pipe's condition.

The video image shall be clear, focused, and relatively free from roll, static, or other image distortion qualities that would prevent the reviewer from evaluating the condition of the pipe. The video will include identification before each section of pipe filmed. The identification will include the project number, the structure number corresponding to the structure number ~~in the set of p~~*Plans* for the project, size of pipe, the date and time, and indicate which pipe is being filmed if multiple pipes are connected to the structure. Notes should be taken during the video recording process. Provide the Engineer with copies of these notes along with the video.

Move the camera through the pipe at a speed not greater than 30 feet per minute. Mark the video with the distance down the pipe. The distance shall have an accuracy of one foot per 100 feet. Film the entire circumference at each joint. Stop the camera and pan when necessary to document and measure defects. Position the camera head perpendicular to all defects requiring measurement by the video micrometer.

430-4.8.2 Reinspection: At any time after reviewing the submitted pipe inspection reports, the Engineer may direct additional inspections. If no defects are observed during the reinspection, the Department will pay for the cost of the reinspections in accordance with 4-3. If defects are observed, the reinspection and all work performed to correct the defects will be done at no cost to the Department. Acceptance of all replacements or repairs will be based on video documentation of the completed work prior to Final Acceptance.