

ORIGINATION FORM

Date: November 14, 2011

Originator: Richard Hewitt, P.E.

Contact Information:

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Specification Title: INLETS, MANHOLES, AND JUNCTION BOXES

Specification Section, Article, or Subarticle Number:

425-3.2.1
425-6.3.1
425-6.3.2
425-6.7

Why does the existing language need to be changed?

The existing Specification language did not have any provisions to allow the use of adjustable manholes with floating frames.

Summary of the changes:

Language was added to allow the use of Adjustable Manhole Rings on appropriate projects.

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

The Engineer of Record would either specify their use or allow their use if a contractor requested to use them on a project.

Will these changes result in an increase or decrease in project costs? If yes, what is the estimated change in costs?

If they are specified by the Department, there would likely be a small price increase when compared to the cost of a typical manhole. If the use is optional, a cost increase is not expected.

With who have you discussed these changes?

Steve Nolan, Jennifer Green Mike Bergin, Rudy Powell, Frances Thomas, Andy Harper.

What other offices will be impacted by these changes?

Roadway Design and Drainage Design.



Florida Department of Transportation

RICK SCOTT
GOVERNOR

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ANANTH PRASAD, P.E.
SECRETARY

MEMORANDUM

DATE: November 22, 2011

TO: Specification Review Distribution List

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

SUBJECT: Proposed Specification: **4250302 Inlets, Manholes, and Junction Boxes.**

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

This change was proposed by Richard Hewitt to allow the use of adjustable manholes.

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 SP965RP or rudy.powell@dot.state.fl.us. Comments received after **December 20, 2011**, may not be considered. Your input is encouraged.

RP/cah
Attachment

INLETS, MANHOLES, AND JUNCTION BOXES.
(REV ~~911-321~~-11)

SUBARTICLE 425-3.2 (Page 443) is deleted and the following substituted:

425-3.2 Gratings, Covers, and Frames: Use gratings and frames fabricated from structural steel or cast iron as designated in the appropriate Design Standard. When “Alt. G” grates are specified in the plans, provide structural steel grates that are galvanized in accordance with the requirements of ASTM A-123.

~~425-3.2.1 Castings:~~ Use rigid frames and covers either 24 inches or 36 inches or optional three-piece adjustable frames and covers as indicated in Design Standards Index No. 201 and the Department’s Qualified Products List (QPL).

~~For three-piece~~The adjustable frames, the inner frame may will include replaceable resilient seats to support the cover. In addition, the cover or the exposed portion of the inner frame shall ~~ould~~ indicate it that the inner frame is adjustable, by clearly having stating the word ~~term~~ “adjustable” imprinted into the exposed portion of the inner frame such that it “adjustable” is visible from the roadway after installation.

SUBARTICLE 425-6.3 (Page 444) is deleted and the following substituted:

425-6.3 Setting Manhole Castings: After curing the concrete as specified above, set the frame of the casting in a full mortar bed composed of one part portland cement to two parts of fine aggregate.

~~425-6.3.1 Standard Castings:~~ Set manhole frames in a mortar bed and adjust to grade using brick or concrete grade rings, with a maximum 12 inch adjustment.

~~425-6.3.2 Optional Adjustable Castings:~~ When using a three-piece adjustable frame and cover, install the frame and cover with brick or concrete grade rings to the base course height. Make final adjustments using the a floating inner ring inner frame in accordance with the manufacturer’s installation recommendations such that the inner frame and cover meet the raised and adjust to final proper grade and slope of the final pavement in accordance with the manufacturer’s installation recommendations.

SUBARTICLE 425-6.7 (Page 444) is deleted and the following substituted:

425-6.7 Adjusting Existing Structures: Cut down or extend existing manholes, catch basins, inlets, valve boxes, etc., within the limits of the proposed work, to meet the finished grade of the proposed pavement, or if outside of the proposed pavement area, to the finished grade designated on the plans for such structures. Use materials and construction methods which meet the requirements specified above to cut down or extend the existing structures.

The Contractor may extend manholes needing to be raised using adjustable extension rings of the type which do not require the removal of the existing manhole frame. Use an extension device that provides positive locking action and permits adjustment in height as well as diameter and meets the approval of the Engineer.

When a three-piece adjustable frame and cover is installed, dislodge ~~the inner frame floating ring,~~ and adjust the inner frame to the new final grade and slope in accordance with the manufacturer's installation recommendations. ~~Obtain training in the initial installation of the adjustable frames and covers from the manufacturer and ensure that the manufacture is available during the installation upon request.~~

Are changes needed to the PPM, Design Standards, SDG, CPAM or other manual?

Jennifer Green has already made changes to Standard Index 201 of the Design Standards.

Is a Design Bulletin, Construction Memo, or Estimates Bulletin needed?

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

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