ORIGINATION FORM
Proposed Revisions to the Specifications

(Please provide all information - incomplete forms will be returned)

Date: 4/13/215 **Specification Section:** 530

Originator: Catherine Earp **Articles/Subarticles:**

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Will the proposed revision involve Design Standard Index changes? Yes ○ No ◉

Roadway Design staff contacted (name):

Will the proposed revision involve PPM changes? Yes ○ No ◉

Roadway Design staff contacted (name):

Will the proposed revision involve CPAM changes? Yes ○ No ◉

Construction staff contacted (name):

Will the proposed revision involve Pay Item changes? Yes ○ No ◉

Estimates staff contacted (name):

Will the proposed revision involve SDG changes? Yes ○ No ◉

Structures staff contacted (name):

Will the proposed revision involve APL changes? Yes ○ No ◉

Product Evaluation staff contacted (name):

Will this revision necessitate any of the following:

Design Bulletin ☐ **Construction Bulletin** ☐ **Estimates Bulletin** ☐

Are all references to external publications current? Yes ◉ No ○

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

Why does the existing language need to be changed?

This is a clarification on the cabling system needed for the articulating block systems.

Summary of the changes:

Single directional cabling is allowed lateral support.

Are these changes applicable to all Department jobs? Yes ◉ No ○

If not, what are the restrictions?

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

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SECRETARY

M E M O R A N D U M

DATE: April 22, 2015

TO: Specification Review Distribution List

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

SUBJECT: Proposed Specification: **5300102 Riprap and Articulating Concrete Block Revetment Systems.**

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

The changes are proposed by Catherine Earp of the State Roadway Design Office to clarify the cabling system needed for the articulating block systems. Single directional cabling will be allowed lateral support.

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 online at http://www2.dot.state.fl.us/SpecificationsEstimates/Development/IndustryReview.aspx . Comments received after **May 20, 2015,** may not be considered. Your input is encouraged.

DS/ot
Attachment

RIPRAP AND ARTICULATING CONCRETE BLOCK REVETMENT SYSTEMS. (REV 4-14-15)

SUBARTICLE 530-1.2 is deleted and the following substituted:

530-1.2 Articulating Concrete Block (ACB) Revetment Systems: Furnish and install an ACB revetment system in accordance with this Section and in conformance with the lines, grades, design, and dimensions shown in the Plans. Submit shop drawings for review and approval by the Engineer in accordance with Section 5. Provide signed and sealed calculations of the block and cable sizing design for approval. Comply with the National Concrete Masonry Association's Design Manual for Articulating Concrete Block Revetment Systems, Second Edition, or the National Highway Institute, Hydraulic Engineering Circular (HEC) No. 23, Publication No. FHWA NHI 09-110. Use a minimum Factor of Safety of 1.5 and a maximum 0.5 inch for the block projection.

Blocks must be open cell and non-tapered unless otherwise stated in the Plans. ~~Bi-directional revetment cabling must be polyester and free to move within the block system.~~ *Revetment cabling must be bi-directional or, for mono-directional cabling, the block installation must include a permanent mechanism within the block matrix to prevent lateral displacement of the installed blocks. Cabling must be polyester and free to move within the block.*

Use only ACB revetment systems currently listed on the Department's Approved Product List (APL). Manufacturers seeking evaluation of their product shall submit an application in accordance with Section 6, and include certified test reports from an independent test laboratory certifying the ACB revetment system meets the requirements of this Section.

If the ACB revetment system is intended for use as bridge abutment protection, include the following drawings with the APL submittal:

1. At the corner transition between the front and side slopes.
2. For anchorages, geosynthetic materials, treatment of voids between adjacent blocks, limits on void size between adjacent blocks and other special details required to successfully install the ACB.
3. For areas adjacent to bridge abutments, detail mat placement around curves, connections, protection of mat ends, and splicing of mat.