



Florida Department of Transportation

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605 Suwannee Street
Tallahassee, FL 32399-0450

JIM BOXOLD
SECRETARY

May 29, 2015

Khoa Nguyen
Director, Office of Technical Services
Federal Highway Administration
545 John Knox Road, Suite 200
Tallahassee, Florida 32303

Re: State Specifications Office
Section **530**
Proposed Specification: **5300102 Riprap and Articulating Concrete Block Retement Systems.**

Dear Mr. Nguyen:

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

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 review and transmit your comments, if any, within two weeks. Comments should be sent via email to SP965DS or daniel.scheer@dot.state.fl.us.

If you have any questions relating to this specification change, please call me at 414-4130.

Sincerely,

Signature on file

Daniel Scheer, P.E.
State Specifications Engineer

DS/ot
Attachment

cc: Florida Transportation Builders' Assoc.
State Construction Engineer

RIPRAP AND ARTICULATING CONCRETE BLOCK REVETMENT SYSTEMS.**(REV ~~4-145-29~~-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~~-~~vendor~~ 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.

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