

ORIGINATION FORM

THE INFORMATION BELOW IS TO BE PROVIDED BY THE ORIGINATOR

Modify Specification _____.
Section/File number

New Section _____ 471 _____.
Section number

Subject: Fender Systems

Origination date: Jan 18, 2006

Originator: Jerry Hocking

Office/Phone: State Structures Office/414-4268 SC 994-4268

Email address/ Jerry.hocking@dot.state.fl.us

Userid:

Problem statement: This specification was part of a developmental specification that has previously been in use (973). It was separated into 471 as a construction specification.

Information source: N/A

Background data: N/A

Recommended

Usage Note:

Expected fiscal

impact, if

implemented: The use of structural plastics and its construction initiated at the request of the Maintenance Department resulting in a developmental specification. This specification is a finalization of the developmental specification that has been in use for approximately 10 years. The life cycle of structural plastics will be approximately 4 to 5 times that of timber. Where as the initial cost of structural plastic is around 1.5 to 2 times that of timber

Implementation of these changes, if and when approved, will begin with the January 2007 letting.



Florida Department of Transportation

JEB BUSH
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

DENVER J. STUTLER, JR.
SECRETARY

MEMORANDUM

DATE: June 27, 2006

TO: Specification Review Distribution List

FROM: Duane F. Brautigam, P.E., State Specifications Engineer

SUBJECT: Proposed Specifications Change: 4710000-Plastic Fender System Components

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification change to Plastic Fender System Components.

This change was proposed by Jerry Hocking of the State Structures Office to propose that this Developmental Specification for structural plastic, become a Standard Specification. Initiated by the Maintenance Office approximately ten years ago, it has now been determined that the life expectancy of structural plastic is approximately four to five times that of timber. Therefore, this is now being proposed for use as a standard specification.

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 SP965DB or duane.brautigam@dot.state.fl.us. Comments received after July 25, 2006 may not be considered. Your input is encouraged.

DFB/sh

Attachment

COMMENTS:

Submitted by:

Phone #:

PLASTIC FENDER SYSTEM COMPONENTS.
(REV ~~4-13-06~~ 6-15-06)

PAGE 570. The following new Section is added after Section 470:

SECTION 471
PLASTIC FENDER SYSTEM COMPONENTS

471-1 Description.

Construct fender systems *using plastic components* in accordance with the Contract Plans and Design Standards.

471-2 Materials.

Meet the following requirements:

Structural Plastics.....	Section 973
Structural Timber.....	Section 952
Concrete Piles.....	Section 455

471-3 Construction Details.

Protect materials at all times against exposure to extreme heat or impact. Transport Structural Plastic (~~SP~~) in a manner that will minimize scratching or damage to the outer surfaces, stack on dunnage above ground so that it may be easily inspected and store in a manner that will avoid damage. Handle and lift *Structural Plastic* ~~SP~~ with nylon slings. Do not use sharp instruments in handling the product. ~~SP~~*Structural Plastic* damaged in shipping or handling will be rejected.

Structural Plastic ~~SP~~ sections containing cracks in the reinforcing rods or cracks, partial or full depth, across the section or splits will be rejected.

Cut, bevel, drill, countersink and otherwise install ~~SP~~*Structural Plastic* in accordance with the manufacturer's recommendations. Set all material accurately to required levels and lines, with members plumb and true and accurately cut and fitted. Securely attach all materials to substrate by anchoring and fastening as shown on the plans. Perform all cutting and drilling in a manner that allows for the collection of all debris and dispose of properly.

Install piles in accordance with Section 455. After driving, cut off piles at the elevation shown on the plans to a tolerance of +0.0"/-2.0" using sawing or other means as approved by the Engineer to provide a smooth level cut. ~~For Structural Timber construct as stated in Section 470.~~

471-4 Method of Measurement.

The quantity of dimensional fiberglass fiber reinforced lumber (~~NSCL~~), fiberglass structurally reinforced composite lumber (~~SCL~~) to be paid for will be the plan quantity, in feet board measure, computed based upon the dimensions shown in the plans. The quantity of fiberglass structurally reinforced composite piles (~~CP~~) to be paid will be the length in feet furnished and driven to the authorized lengths, as approved by the Engineer. ~~For wood components see Section 470.~~

471-5 Basis of Payment.

Prices and payment will be full compensation for the work specified in this Section including all material, storage costs, disposal of unused materials and waste, transportation costs,

labor, equipment, fasteners and other necessary items required for completing the work. No separate payment will be made for plates, bolts, screws or other hardware necessary to complete the work.

Price and payment for *Plastic Fender System Components including fiberglass structurally reinforced composite piles* will be full compensation for all labor, equipment and materials required to furnish and install the piles to the elevation shown in the plans. No separate payment will be made for pile cut-offs. *Plastic Fender System Components including fiberglass structurally reinforced composite piles* to be paid for under Section 455.

Payment will be made under:

Item No. 471-1 Plastic Marine Lumber – MB.