

RESPONSES TO COMMENTS RECEIVED FROM INDUSTRY REVIEW

Florida Prestressed Concrete Association, Inc. February 2, 2006

1- Comment: 450 – 11.1 - Detensioning

2nd sentence (24 hours after casting) unless sequential single line casting occurs and then after every 24 hours thereafter.

Response: Section 450 does not allow multiple sequential casting of the same stressed line. The specification requires project administrator's concurrence through supplemental agreement or change order. The producer should address the aforementioned testing requirements as part of the proposed operation whenever there is a need for such a change.

Action: No change is required.

2- Comment: 450 – 2.1 Sweep

Beam sweep should be controlled according to PCI tolerances.

The maximum allowable permanent sweep for piling should be in accordance with PCI tolerances.

Response: For the structural integrity of the products, the Department considers the maximum allowable sweep limit of 1.0 inch for piling and 1.5 in for beam to be necessary. These limits were the requirements of the specifications prior to 2004 version of the Standard Specification. During the rewrite 2004 version of Standard Specification it was inadvertently excluded from the 450 specification.

Action: No change is required.

3- Comment: 450- 6.4 – End Header Locations

Stay with the current specification unless the temperature drops below 55 degrees. (Producers lose up to 10 ft of casting bed with current proposed change).

Response: We agree and make necessary changes.

Action: The Subarticle will be revised to include the minimum distance requirements of 5 ft only when the temperature is expected to be below 55 degrees.

4- Comment: 450 – 11.2 Method of Stress Transfer

New procedure dictates that all bottom strands be cut first which is not practical (maybe impossible) and would pose a safety risk. Section should remain as previously written.

Response: This procedure was approved as a supplemental specification, effective January 2004. The change was proposed by the State Structures Design office to eliminate the vertical cracking at the girder ends as a result of camber and dragging of the beams during the detensioning. The detensioning of the bottom strands maintains the bottom fiber in compression, which may eliminate or minimize the cracks due to camber and dragging of beam-ends. The Subarticle still allows the alternate-detensioning pattern to suit the Plant's need. The Plant may propose the other alternate procedure as part of the quality control plan.

Action: No change is required.

5- Comment: 450 – 12.2.2 Spall

End of 1st sentence (no deeper than concrete cover), except at the end of pile and beams as long as reinforcing is not fully exposed.

Response: The suggested comment eliminates the limit on dimensional tolerance of 2.0 sq ft, which is necessary to be considered a minor repair. We do not agree with the suggested comment.

Action: No change is required.

6- 450 – 14.2 item 5

Insert...of the “Producer’s Special Engineer” in place of “The Contractor’s Engineer”.

Response: The proposed Specification meets the requirements of the new definitions for Contractor's Engineer of Record and Specialty Engineer. The new definitions will be included as part of the Workbook of the Contract documents of July 2006 lettings. The State Structures Design Office has proposed the modified definitions. The change meets the requirements of the new rule. It requires that any structural evaluation of a major bridge components has to be performed by a pre-qualified firm to assure the DOT that the individual is qualified to perform the work and the work has been through a quality control/quality assurance process.

Action: No change is required.

7- Comment: 450 – 16.2 Storage

Industry takes strong exception to entire re-written section. Original Section should not change. Industry requests a meeting on this Section.

Response: The FPCA members have requested a meeting prior to further processing of this change. Jeffrey Pouliotte, the Sate Construction Structures Design Engineer, has proposed the change. He agreed to reinstate the original language of Subarticle 450-16.2. We will make necessary arrangements with FPCA members to discuss this proposed change and find out about the details of their comments.

Action: Reinstate the original language of Subarticle 450-16.2. The changes to this Subarticle will be proposed in the future date.

Andy Clark

Comment

From: Andy Clark [mailto:aclark@lewarecc.com]
Sent: Wednesday, January 04, 2006 6:14 PM
To: Bob Burleson
Subject: FW: 4500000

Bobby:

I forwarded this topic to Dura-Stress for their comments. I concur with John Jarrett's statement. If the Department is suggesting that the Contractor hire a Specialty Engineer it will only result in more costs, additional time and conflicts. Leave it with the people that deal with it on a daily basis. They'll be using a P.E. Is the Contractor's P.E. suppose to be more qualified and/or have more experience that the prestressed supplier?

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-----Original Message-----

From: **John Jarrett** [mailto:jjarrett@durastress.com]
Sent: Wednesday, January 04, 2006 3:05 PM
To: Andy Clark
Subject: RE: 4500000

The following item is of major concern :

450-14.2 ENGINEERING EVALUATION
Specialty Engineer has been changed to Contractor's Engineer of Record

Response: The proposed Specification meets the requirements of the new definitions for Contractor's Engineer of Record and Specialty Engineer. The new definitions will be included as part of the Workbook of the Contract documents of July 2006 lettings. The State Structures Design Office has proposed the modified definitions. The change meets the requirements of the new rule. It requires that any structural evaluation of a major bridge components has to be performed by a pre-qualified firm to assure the DOT that the individual is qualified to perform the work and the work has been through a quality control/quality assurance process.

Action: No change is required.

Rod Powers

450-2.5 Quality Assurance Inspection and Testing: The Engineer will perform periodic inspections, sampling, and testing to ensure the quality and acceptability of the materials, methods, techniques, procedures and processes being utilized by the Contractor in the fabrication of precast prestressed concrete products. The quality assurance inspection and testing will be performed in accordance with Section 8.1 of the Materials Manual, which may be viewed.....

Comment:

I have always been concerned about construction specifications that place contractual requirements upon the Engineer to "run tests to ensure the quality and acceptability of the materials, methods, techniques, procedures and processes being utilized by the Contractor."

This IS the contractor's job. It is the Engineer's job to do whatever is necessary to verify the accuracy and integrity of the contractor's tests. This spec revision now adopts some more very specific direction to the Engineer relating to inspection and tests.

What happens if the Engineer defaults and it is later discovered that failing materials entered the work?

If I were the contractor, I would be looking to the engineer to share some of the blame.

If we are going to have this kind of contractual requirements (commanding the engineer) then we need to add some disclaimers against default actions.

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Response: The contents of this Subarticle are not new change. The only change is reference to Section 8.1 of the Materials Manual, which provides the details of plant qualification process, quality assurance testing and inspection process of concrete and other materials. The Department's quality assurance process includes product evaluation, verification inspection and testing, independent assurance and independent verification. All of these actions provide confidence that the products will satisfy given requirements for quality and accept products based on the Contractor's acceptable quality control inspection and testing. This meets Code of Federal Regulations.

Action: No change is required.

Steve Voll

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450 comments below

1- Comment No.1

1) **450-12-1** Non Comp Products, who is to do the biannual report? As I read it the Contractor's are to fill the report out in accordance with 8.3 of the MM. We have over 15 contractors that Durastress does business with. This just does not make sense when some of the NC are done under previously approved repair procedures in house.

Response: The Word Contractor means the prestressed concrete plant. The data is not job specific. It is plant specific data. It is not the general contractor's responsibility to provide the data. The process is explained in Section 6.3 of the Materials Manual.

The proposed change will be modified to avoid this confusion. It is the Plant's responsibility to provide data to the Department. The Department will verify the data and performs further process in accordance with Section 6.3 of the Materials Manual.

Action: Change the sentence to read: The QCM shall submit to the Engineer the semiannual compilation of plant's major deficiency data for each category and group of products in accordance with Section 8.3 of the Materials Manual, which may be viewed at the following web address:

<http://www.dot.state.fl.us/statematerialsoffice/administration/resources/library/publications/materialsmanual/documents/mm-section83-clean.pdf>

2- Comment No. 2

2) **450-12-1** Still on the same issue. Am I going to get a chance to review this data for accuracy?

Response: Yes, the Department will review the data and in case of doubt question its accuracy.

Action: No further change is required.

Comment No. 3

3) **450-14.2-** Submittal of Proposal for Engineering Evaluation. #5 states that the Contractor's EOR must supervise the repair. This seems like it would be very time consuming to Durastress as they have an in house Specialty Engineer on site.

Response: The proposed Specification meets the requirements of the new definitions for Contractor's Engineer of Record and Specialty Engineer. The new definitions will be included as part of the Workbook of the Contract documents of July 2006 lettings. The State Structures Design Office has proposed the modified definitions. The change meets the requirements of the new rule. It requires that any structural evaluation of a major bridge components has to be performed by a pre-qualified firm to assure the DOT that the individual is qualified to perform the work and the work has been through a quality control/quality assurance process.

Action: No change is required.
