3470201 Portland Cement Concrete – Class NS.
COMMENTS FROM INTERNAL/INDUSTRY REVIEW

****

Mike Bergin
352-955-6666
michael.bergin@dot.state.fl.us

Comment: (10-8-10) The following are Ghulam Mujtab's review comments related to the proposed 347 specification changes: 1- The first sentence is very lengthy. A few requirements are included in one sentence. It is better to separate the requirements in different sentences. 2- Three compressive strength average test results have been mentioned. It has not been mentioned that the results of how many test cylinders are used to determine the average compressive test result. 3- The compressive strength test results should also be acceptable from the laboratory test data. The proposed change only accepts test data of production concrete. 4- The producer should have a choice of submitting the required proposed mix design information on the department form or any other form. The important thing is the availability of the required information. 5- There is no need of performing the test within twelve month of submittal of the mix. This requirement should be deleted.

Response:

****

Ron Holcomb
239-825-3519
rholcomb@cemexusa.com

Comments: (10-21-10) Text: 347-4.1 Concrete Mix Design: Before producing any concrete, submit the proposed mix design to the Engineer on a form provided by the Department, along with three compressive strength average test results tested in accordance with ASTM C 39, demonstrating that the mix will meets the minimum 28-day compressive strength requirement of 2,500 psi. Theis test results data can be historical data from Department projects or commercial work, both performed within the last twelve months period from the date of the submittal of the design mix design. Use only concrete mix designs having prior approval of the Engineer. Comment- The requirement to have strength data for every mix request would be a significant, depending on how it is interpreted. If the concrete used for the strength data was required to include every component specific to the source of the new mix design, then it would require 28 days minimum to substitute one certified material for another. In the event a source of certified sand was unavailable, the supplier would have to bring in the new material and test; then wait for strength results to submit. It would seem that a material substitution of a similar material should be allowed without testing, particularly a rock or sand source change to an approved mix design. This follows the precedent established with structural concrete, although the current requirement for structural concrete substitution to include a chloride test should not be applicable to NS. Even the effect of substituting many cementitious or admix sources would have little effect on the performance of a 2500psi NS mix. We believe there should be some latitude for mirroring an existing design for non-structural concrete. We also believe the requirement for strength data should be, at most, specific to a cement source and not all of the components involved, when mirroring an approved mix formula.

Response:

****

Katie Bettman
904-360-5391
katie.bettman@dot.state.fl.us

Comments: (10-26-10) Does the Department want the average of three compressive strength test results OR three averages of three cylinders each? I think this needs to be clarified. 2) How can a new concrete mix design have data from a Department project if it hasn't been approved yet? 3) The last sentence is confusing. It may be because of the placement. This section gives the requirements for concrete mix designs. Since the previous sentence is describing what data can be used for the test results, it seems like this is contradicting what was just stated about using Department or commercial data. This sentence was previously in the 347 Specifications. Originally, the statement was to emphasize that non-structural concrete could not be produced for a DOT project before the mix was approved.

Response:

****

Comments: (date)

Response:

****

Comments: (date)

Response:

****

Comments: (date)

Response:

****

Comments: (date)

Response:

****