LAP3440000 CONCRETE FOR LOCAL AGENCY PROGRAM (LAP) (CLASS-D) COMMENTS FROM INTERNAL/INDUSTRY REVIEW

Roger C Schmitt <u>Rschmitt@fcpa.org</u> (386) 453-9008

Comments: (5-14-21, Industry)

There is no specific reference for concrete roadway paving or concrete for multi-use concrete

trails.

Response: This is beyond of the Spec scope. Concrete pavement is detailed in FDOT Spec 350

and the reference is provided here in Table 344-1 footnote 5.

Actions: No change is needed in the proposed specification.

Neil Monkman neil.monkman@wcgfl.com (239) 462-7371

Comments: (5-21-21, Industry)

Just a note that I feel the proposed revisions are very well structured and this provides an

excellent amount of clarity to the specification.

Response: Thank you.

Actions: No change is needed in the proposed specification.

Jacki Hart jackih@charleytoppino.com (954) 775-6949

Comments: (5-24-21, Industry)

344-2.1.1 Portland Cement: Portland cements meeting the requirements of AASHTO M -85 or ASTM C-150 is required. Different brands of cement, cement of the same brand from different facilities or different types of cement shall be stored separately and shall not be mixed. We carry type I/II (MH) are they going to consider that two different types?

Response: Type I/II (MH) is considered a single product.

Actions: No change is needed in the proposed specification.

344-3.6.2 Concreting in Hot Weather:Unless the specified hot weather concreting measures are in effect, reject concrete exceeding 86°F 85°F at the time of placement. In looking at the break reports that we have on 17 different mixes just to get a clear picture as to what our temperatures usually stay around and I only found 3 that tested below 88deg. The ambient temp was 89deg and tested at the plant so no travel time, only mix rotations. Not sure what FDOT considers HOT WEATHER but we are EXTREAM hot weather here in South Florida. If FDOT is going to cause us to use Nitrogen or Ice the cost to install the equipment and to dispense will cause the DOT mix prices to escalate dramatically, or they will have to pour at night which again will cost the Department additional expenses in after hour charges. With all the changes that the

department is making, the proposed temperature needs to be looked at closely with realistic parameters for laying fresh concrete. We understand the 100 deg cap on rejecting a load but the minimum temp needs to be addressed. Based on our data, a more reasonable temperature is 89 degrees.

Response: The term "hot weather concrete" refers to the concrete mix design classification with temperatures between 86°F and 100°F. Temperatures are related to concrete internal temperature not the air temperature. Mix design classified as "hot weather mixes" can be placed up to 100°F, while mixes without this classification are only allowed to be placed if 85°F is not exceeded. Concrete with temperatures below 86°F shall not be rejected.

We understand the hot weather conditions are very frequent in South Florida, but the temperatures defined in the Spec are supported by research and are accepted nationwide.

- The Contractor can use chilled water to reduce the concrete temperature and select the appropriate time to produce concrete within the temperature limits of this Specification. This is a common practice followed when mass concrete is produced.
- FDOT does not allow the use of liquid nitrogen.

Actions: No change is needed in the proposed specification.

Duane L Henderson <u>duanel.henderson@cemex.com</u> (321) 228-0256

Comments: (5-31-21, Industry)

In Section 344-2.1.1 – it says that all cement must meet AASHTO M-85/ASTM C-150. This does not include PLC (Type 1L). It needs to include AASHTO M240 and ASTM C-595 so Type 1L can be used. It states that Type 1L can be used in 344-2.1.5, but it is not the correct spec (it is a M240/C-595 material). The cement spec should be expanded to include type IL, not just acknowledging this as an approved type for use.

Response: Agree.

Actions: Sub article will be modified as follows:

344-2.1.1 Portland Cement: Portland cements meeting the requirements of AASHTO M_.85, ASTM C150, AASHTO M 240 or ASTM C595 is required. Different brands of cement, cement of the same brand from different facilities or different types of cement shall be stored separately and shall not be mixed.

(344-3.4) Remove requirement for submitting mixes on a form provided by the engineer. This could have endless variations and could be problematic for all parties having to review them. Perhaps simply state, submit proposed mixes to engineer for review. It may be best to have a handful of submittal variations through different producers than potentially hundreds of variations, should the engineering community be coming up with their own forms.

Response: Agree.

Actions: The Subarticle will be modified as follows:

344-3.4 Concrete Mix Design: Before producing any Category 1 or Category 2 <u>concrete</u>, submit the proposed mix designs to the Engineer on a form provided by the Engineer. For Category 3, submit to the Engineer for approval, FDOT approved mix designs. Do not use concrete mix designs without prior approval of the Engineer.

(344-4.2) Remove the "a" in the segment that reads "... produced by a production facilities that are currently ..." Table 344-1 (Master Proportion Table) The proposed way in specifying slump is not clear. The current definition makes more sense. It allows for Type F, G, I or II admixture to be used, but it would be better to just add a note stating that.

Response: We understand the concern, and currently the FDOT is enhancing the language in Specification 346 related to slump (under review now). Similar changes will be proposed in the LAP Spec for consistency.

Actions: No change is needed in the proposed specification.
