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April 3, 2006

MEMORANDUM
06-05

TO: District Directors
District Construction Engineers
Toll Road Operations Engineers
District Materials & Tests Engineers
District Highway Management Directors
District Area Engineers
Project Engineers/Supervisors

FROM: Mark A. Miller, Director *Mark Miller*
Division of Construction Management

Subject: Moisture Tests for HMA & SMA, 2006

Moisture tests are required for HMA & SMA surface mixtures in accordance with the Standard Specifications sections 401.09 & 410.09. Our experience has been that moisture tests rarely fail, and when failures do occur no detrimental effects to the pavement have been observed. Therefore, the requirement for a plate sample for a moisture test is being deleted per the attached special provision.

The producer is required to monitor moisture content on the road and at the plant as part of its Quality Control Plan. Sections 401.10 and 410.10 state that flushing or bleeding of HMA or SMA mixtures will not be permitted and that these mixtures shall be removed if the problem exists. These measures provide adequate quality control to avoid flushing and bleeding.

The attached special provision should be incorporated into all existing contracts by means of a no cost change order.

MAM:dls

attachment

MOISTURE TEST FOR HMA AND SMA

The Standard Specifications are revised as follows:

SECTION 401, BEGIN LINE 182, DELETE AS FOLLOWS:

401.09 Acceptance of Mixtures

Acceptance of mixtures for binder content, VMA at N_{des} , and air voids at N_{des} for each lot will be based on tests performed by the Engineer. ~~Acceptance testing for surface mixtures will include tests for moisture content.~~ The Engineer will randomly select the

SECTION 401, BEGIN LINE 221 DELETE AS FOLLOWS:

~~The maximum percent of moisture in the mixture shall not exceed 0.10 from plate samples.~~

A binder draindown test in accordance with AASHTO T 305 for open graded mixtures shall be completed once per lot in accordance with 401.07 and shall not exceed 0.50%.

The Engineer's acceptance test results for each subplot will be available after the subplot and testing are complete.

Air voids, binder content and VMA values will be reported to the nearest 0.1%. ~~Moisture and draindown~~ *Draindown* test results will be rounded to the nearest 0.01%. Rounding will be in accordance with 109.01(a).

SECTION 410, BEGIN LINE 132, DELETE AS FOLLOWS:

410.09 Acceptance of Mixtures

Acceptance of mixtures for binder content, ~~moisture~~, and gradation for each lot will be based on tests performed by the Engineer. The Engineer will randomly select the location(s) within each subplot for sampling in accordance with ITM 802.

Samples from each location shall be obtained from each subplot from the pavement in accordance with ITM 580. ~~The second sample shall be located from the random sample by offsetting 1 ft (0.3 m) transversely towards the center of the mat and will be used for the moisture sample.~~ The test results of the sublots will be averaged and shall meet the requirements for tolerances from the JMF for each sieve and binder content.

~~The maximum percent of moisture in the mixture shall not exceed 0.10 from plate samples.~~

SECTION 410, BEGIN LINE 165, DELETE AS FOLLOWS:

Single test values and averages will be reported to the nearest 0.1% ~~except moisture will be reported to the nearest 0.01%.~~ Rounding will be in accordance with 109.01(a).