Florida Department of Transportation

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September 5, 2003

This Memo has Expired

MEMORANDUM NO: 22-03
REVISED (Changed wording shown as underlined text)

TO: **DISTRICT CONSTRUCTION ENGINEERS**

FROM: Ananth Prasad, State Construction Engineer

COPIES: David Sadler, David Wang, Jim Musselman, Bob Burleson (FTBA), and Jim Warren (ACA)

SUBJECT: **SPECIFICATION 9-2.2.1 TERMINOLOGY CLARIFICATION**

Recently, questions have arisen about terminology used in Specification 9-2.2.1 on Lump Sum projects. In this specification, the terms "minimum spread rate" and "spread rate" were used in Section 9-2.2.1. The intent behind the terminology is shown below with special emphasis.

> The average spread rate will be used to determine if the amount of asphalt placed on the project meets the minimum requirements. Before placing asphalt mix, propose a spread rate ***(means a* TARGET SPREAD RATE)** for each layer, which when combined with other layers, will meet the design thickness/spread rate ***(means the* PLANS SPECIFY A TOTAL DESIGN MINIMUM THICKNESS OR MINIMUM SPREAD RATE)** specified in the plans. The weight of the mixture will be determined as provided in 320-2 (including the provisions for automatic recordation system).
>
> On projects specifying a thickness in the plans for asphalt, the minimum spread rate ***(means a* TARGET SPREAD RATE)** will be established by multiplying the maximum specific gravity of the asphalt mix (as indicated on the verified mix design) by 43 lbs/sy (for fine graded mixes) or 44 lbs/sy (for coarse graded mixes) for every inch of asphalt [9.2 kg/m2 for every 10 mm of asphalt (for fine graded mixes), or 9.4 kg/m2 for every 10 mm (for coarse graded mixes)].
>
> On projects specifying a total spread rate of mix on the plans for asphalt, calculate the average spread rate ***(means the* ACTUAL AVERAGE SPREAD RATE)** for each layer per sublot (as defined in Section 334), and then sum the

individual layers together to calculate the total spread rate (***means the*** **TOTAL ACTUAL AVERAGE SPREAD RATE)** for all the layers.

During construction, an average rate (***means the*** **ACTUAL AVERAGE SPREAD RATE)** will be calculated for each layer per each sublot in accordance with Section 334 and compared with the proposed spread rate (***means the*** **TARGET SPREAD RATE FOR EACH LAYER).** In the event the average spread rate (***means the*** **ACTUAL AVERAGE SPREAD RATE CALCULATED IN THE FIELD)** for the sublot is less than the proposed spread rate (***means the*** **TARGET SPREAD RATE),** the Engineer will determine if the material is acceptable to remain in place at full pay, remain in place at reduced pay or must be removed and replaced at no cost to the Department. Final disposition of structural course sub lots will be based upon the following:

1. The average rate (***means the*** **ACTUAL AVERAGE SPREAD RATE CALCULATED IN THE FIELD FOR EACH LAYER)** must be within ± 10 percent (***per subarticle 5-2, Coordination of Contract Documents,*** **THIS OVERRIDES PROVISIONS OF SUPPLEMENTAL SPECIFICATIONS)** of the target spread rate (***means the*** **TARGET SPREAD RATE EACH LAYER)** for the layer (unless otherwise approved by the Engineer), and
2. The total design thickness/spread rate (***means the*** **TOTAL DESIGN MINIMUM SPREAD RATE**) specified in the plans must be met.

The sublot, in question will be combined with other layers (including FC-6, but excluding FC-2 and FC-5), when determining if the total specified thickness/spread rate (***means the*** **TOTAL DESIGN MINIMUM SPREAD RATE)** is met. Reductions in pay will be determined per roadway sublot by applying a proportional reduction in payment for the material in question, based on a ratio of average spread rate (***means the*** **ACTUAL AVERAGE SPREAD RATE CALCULATED IN THE FIELD)** for the sublot to the proposed spread rate, (***means the*** **TARGET SPREAD RATE)** which will then be applied using the unit price(s) as shown in Table 9-1.

The maximum specific gravity is shown as Gmm for the optimum asphalt content at which the mix is designed and is shown on the Hot Mix Design Data Sheet of the Mix Design.

If you have any questions, please contact David Wang at 850-414-4152 (suncom 994-4152) in the State Construction Office.

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