



Florida Department of Transportation

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**** Expired ****

MEMORANDUM NO. 03-04
MATERIALS BULLETIN NO. 01-04

TO: DISTRICT CONSTRUCTION ENGINEERS
DISTRICT MATERIALS ENGINEERS

FROM: Ananth Prasad, P.E., Director, State Construction Office
Thomas O. Malerk, P.E., Director, State Materials Office

COPIES: Bob Burleson, Greg Schiess, David Sadler

SUBJECT: THICK LIFT COMPACTION OF ROCK BASE

The Department's research on thick lift compaction of rock base indicates that typical compaction equipment and methods used by contractors are not transmitting sufficient energy to the bottom half of the layer constructed with rock base placed in a single thick lift (defined as a compacted thickness of greater than 8 inches as per Standard Specification 200-5.2). Current efforts conclude that the specified density is not being obtained in the bottom half of the thick lift layer.

The Department is pursuing additional research as to how to improve the energy transfer to the bottom half of the layer by increasing: (1) the compactor energy, (2) the contact area of the compactors and (3) the sub grade stiffness.

Meanwhile, the Department will not permit the compaction of rock base in a single lift greater than 8 inches until further notice.

If you have any questions, please call Sastry Putcha at 850-414-4148.

AP/TM/pw