HR-294 Ammonium Phosphate/Fly Ash Road

KEY WORDS: Base Stabilization, Rigid Base, Ammonium Phosphate, Fly Ash

ABSTRACT

The objective of this research project was to evaluate the construction and service performance of ammonium phosphate/fly ash (APFA) treated base courses of crushed fines and/or unprocessed sand. Specific test results related to construction of the test sections were included in the 1987 construction report by Iowa State University. The performance of the experimental sections is dealt with in this final report.

This 1986 project demonstrated that in all cases the control sections utilizing a Type B base experienced dramatically less cracking in the surface than the APFA treated base sections. The cost per mix and subsequent surface maintenance costs for the APFA base sections, especially those having a substantial amount of limestone, were higher than the Type B base control sections. This type of construction may prove to be economical only when petroleum product costs escalate.