# TECHNICAL REPORT TITLE PAGE

1. **REPORT NO.**
   
   TR-422

2. **REPORT DATE**
   
   May 2005

3. **TITLE AND SUBTITLE**
   
   Pre-Treatment for Reduction of Asphalt Absorption in Porous Aggregate

4. **TYPE OF REPORT & PERIOD COVERED**
   

5. **AUTHOR(S)**
   
   Edward J. Engle, P.E.
   
   Secondary Road Research Coordinator

6. **PERFORMING ORGANIZATION ADDRESS**
   
   Iowa Department of Transportation
   
   Research and Technology Bureau
   
   800 Lincoln Way
   
   Ames, Iowa 50010

7. **ACKNOWLEDGMENT OF COOPERATING ORGANIZATIONS/INDIVIDUALS**
   
   The author would like to thank the Iowa Highway Research Board, the Louisa County Board of Supervisors and County Engineer, Norris Asphalt Paving Co., and Jebro Inc., for their support and participation in this project.

8. **ABSTRACT**
   
   The objective of this research was to evaluate the performance of the product Ultracote® (a polymer based additive produced by Ultrapave, a division of Goodyear) as an aggregate pre-treatment for the reduction of asphalt binder absorption in hot mix asphalt (HMA). The product was tested with a paving project in Louisa county, Iowa with aggregate that had historically shown very high asphalt binder absorption.

   Results of the testing did not provide any evidence of reduction in binder absorption.

9. **KEY WORDS**
   
   HMA
   
   Asphalt Binder Absorption

10. **NO. OF PAGES**
   
   23