



Full-Depth Reclamation (FDR) with Cement Gives New Life to Old Natchez Trace in Tennessee



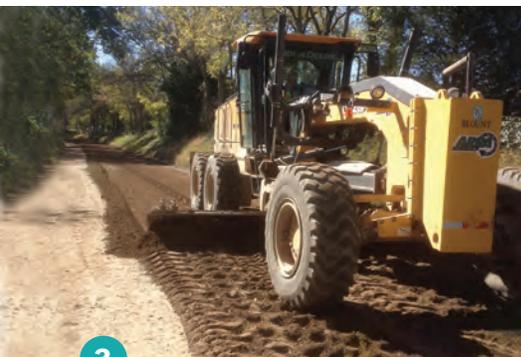
1

Blount Construction using calibrated spreader placing portland cement at the appropriate rate



2

Mixing cement and water into pulverized pavement as traffic runs in the adjacent lane



3

Blount Construction grading reclaimed roadway with motor grader

Old Natchez Trace is a 4.2 mile stretch of highway in Williamson County, Tennessee, just northwest of Franklin. It was once part of the original FHWA Natchez Trace Parkway that stretched from Natchez, Mississippi, to Nashville, Tennessee. The Parkway was later realigned and this section became part of the Williamson County Highway System.

In 2013, Williamson County Highway Superintendent Eddie Hood designated Old Natchez Trace on his construction schedule for a rehabilitation project. As Hood discussed the project with Collier Engineering, it became evident that just an ordinary asphalt overlay would not be acceptable due to the amount of base failures and need for shoulder work throughout the project. In the fall of 2013, Hood and Collier Engineering contacted their local PCA-SE representative to discuss the possibilities of utilizing full-depth reclamation (FDR) with cement. The group concluded FDR with cement would be the best rehabilitation approach for the roadway.

The project was scheduled for late summer 2014; local PCA-SE representative assisted Collier Engineering in obtaining specifications and design guidelines for FDR with cement. The project design was for 49,820 square yards of eight inches FDR utilizing 950 tons of portland cement, two inches of

intermediate asphalt, and 1.5 inches of surface asphalt. The low bid was awarded to Blount Construction of Marietta, Georgia who subcontracted GeoServices, LLC to perform sampling, mix design, and quality control testing for the project.

Construction began on Old Natchez Trace on October 20, 2014, and concluded on October 28. Blount Construction completed this project in only seven working days, minimally impacting local traffic, and met the unique challenge of performing construction in a historical site, which called for the process to be continually monitored by an archeologist.

After the FDR with cement was finished and all tests passed, Williamson County Highway Department self-performed the re-ditching and paving to complete the project.



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The Natchez Trace Historical Marker

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