

Georgia DOT micromilled 500,000 square yards of interstate highway pavement in a single weekend. This innovative approach added 3-5 years of life and delayed complete removal/replacement, saving taxpayers millions of dollars and miles of inconvenience.

Saved approximately \$800,000

Completed in a single weekend

BACKSTORY:

With tight drainage requirements, an interstate highway that services 375,000 vehicles a day, and precise engineering demands, Georgia DOT used micromilling to save both time and money. The contractor, Miller Group, had to meet the profile grade as well as the vertical ridge-to-valley requirements. Furthermore, any damage to underlying layers and any extended time the road was closed to the traveling public would incur penalties or need to be redone at the contractor's expense.

PROBLEM:

Georgia DOT set a micromilling target of 1.6mm for ridge to valley distance on I-285 in Delkab County. Anything outside of those measurements would damage the underlying layer and need to be redone. GDOT further required a measurement of 5mm from the center of one strike point to the adjacent strike point. With penalties charged at the risk of the contractor, Miller Group was careful to meet these specifications.

The contractor maintained the grade and cross slope of the dense-graded surface underlying the OGFC. Using a 30 ft ski to help maintain proper grade, the cross slope was between 1.5 - 2%. Because I-285 is 4-7 lanes wide, they needed a true cross slope from the crown point to the edge of the pavement. To accomplish this, the contractor invested in a specialty micro milling drum, with three times as many bits as a conventional drum used in cold planing.

“ It's good for the taxpayer. It's good for the state. And it puts the state on the forefront of extending the maintenance dollars. ”

— Kimbel Stokes, GM Miller Group, Inc.

SOLUTION:

The Micromilling removed wheel ruts and other surface irregularities and restored proper grade and transverse slope to the road. The asphalt millings were taken back to the paving contractor's plant to be incorporated into new mixes.

PHOTOS:

