

ABSTRACT

A four and one-half inch thick, bonded portland cement concrete (PCC) overlay and integral widening were used to rehabilitate a 4.5 mile section of Iowa route 141 from US 169 to Iowa 210 in Dallas County. There was a substantial amount of cracking in the old 20 feet wide PCC pavement. Most of the widening, which was tied to the original slab by dowel bars, was placed as a four feet wide section on one side.

Coring has shown that the overlay is well bonded and testing with the Delamtect has shown less than 1% debonding. Midpanel transverse cracks in the old pavement have reflected through the overlay (as expected). Some new transverse cracking has occurred. This cracking has not caused any significant problems. In general, the overlay is performing quite well.