

Problem:

Accelerated
deterioration

Solution:

Fog seal,
crack sealing
and modified
chip seal

Success Story: Conventional Fog Seal

Chickasaw Children's Village, located in Kingston, OK, is situated on a stretch of road that was in terrible condition until just recently. Constructed over 10 years ago, the cracking and oxidation were only worsened by a two-year drought which caused frequent longitudinal cracks.

The Chickasaw Nation Roads Department was challenged with how to spend their funding from the Federal Highway Association's tribal transportation program. The department could allocate \$140,000 on 1½-inch hot mix asphalt overlay, plus an additional \$25,000 on milling. Or it could use preservation treatments to completely restore the pavement for \$45,000 in total. The choice was obvious, and the pavement was rehabilitated using a conventional fog seal, crack sealing and modified chip seal.

The roads department used a Crafcro Super Shot 125 Melter/Applicator from Paving Maintenance Supply, Inc. to seal existing cracks with 2,600 pounds of Crafcro Road Saver 515 crack sealant.

Contractor PSI Seal Masters, Inc. then used polymer-modified asphalt emulsion CRS-2+; the selected aggregate was a 3/8-inch limestone from the Dolese Quarry in Coleman, OK, and the specified fog seal was CQS-1F.

Weather conditions were ideal. Warm temperatures, a strong breeze and the specialized chemistry allowed the fog seal to dry in about 20 minutes. Once the material had cured, crews immediately applied a second coat. Dry weather and the engineered fast cure times helped the material break quickly, preventing any runoff.

The results looked astonishing, and given the extra protection from the double fog seal, it is anticipated that the Children's Village road will last longer than originally expected — up to 13 years with timely maintenance. Finally, the Chickasaw Nation Roads Department is able to utilize the considerable budget savings on other area projects.

For inquiries, contact:
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