

## Maintenance of Traffic

### Interstate 70 Overlay Project

Ellsworth and Lincoln Counties, Kansas

#### Project Overview

*This project involved both the first and largest bonded concrete overlays on asphalt on Interstate-70 in the state of Kansas. Attention to detail in staging and an innovative maintenance of traffic plan helped make this complex and challenging project a success.*

#### MOT Variables

- The project involved bonded concrete overlays on existing sections of asphalt pavement (spanning 15.2 miles) in two counties.
- As work began, the contractor was awarded two more tied overlay projects.
- Koss Construction proposed using an existing and active median crossover for maintenance of traffic to save money for the DOT.
- Traffic was split onto median cross-overs and converged into head-to-head alignment.
- This strategy allowed Koss to pave two miles both on the eastbound and westbound lanes at the same time.
- The approach also allowed the contractor to stay on schedule, especially in transporting more equipment and personnel, thereby improving productivity.



#### Fast Facts

**Owner**

Kansas DOT

**Contractor**

Koss Construction Company

**Contract Value**

\$19.85 million

**Concrete Cost**

\$11.58 million

**Paving Completion**

November 2011

- As mainline paving was performed, Koss had to mill 2 ft of the 10 ft. shoulder, making it difficult for trucks to navigate around the paving train. With the existing slope grade constantly changing, the contractor used millings to stabilize the outer edge.
- Close communication also kept crews and the public safe in and around the construction workzones.



### Construction Factors

- A highly experienced crew was selected for this job, which helped achieve a very smooth pavement with an average profile index of 9.2 in. per mi.
- Concrete paving was done in 30-ft wide passes. Koss requested and received approval to insert tie bars mechanically, including some of the centerline tie bars, which were placed using a tie-bar inserter built by Koss mechanics.



### Other Factors

- In addition to precise placement of stringline (precisely tensioned aircraft cable) with pins placed at 50 ft intervals, Koss proposed and successfully used stringless paving over the final 2 miles of paving.
- Extremely hot weather, severe electrical storms, and large amounts of rain proved no match for an experienced team and a well-executed plan.

Presented by the

**Missouri-Kansas Chapter, ACPA**  
 10707 Barkley Street  
 Overland Park, KS 66211  
 913.381.2251

**Todd LaTorella, P.E.**  
 Executive Director  
[toddl@moksacpa.com](mailto:toddl@moksacpa.com) | email  
[www.mokscapa.com](http://www.mokscapa.com) | web



MOT-6-2015