

## Iowa DOT paves US 30 shoulders with foamed asphalt

THE IOWA DOT is researching new applications for foamed-asphalt stabilizing agent, which cuts down on curing time for cold-in-place projects and uses less water than other stabilizing agents.

### Foamed asphalt basics

Foamed asphalt is created when a small amount of cold water is injected into hot asphalt binder (approximately 300 degrees Fahrenheit). The water immediately turns into steam that creates air bubbles in the asphalt binder, or foam.

“The process is practically instantaneous,” says Mike Heitzman, Iowa DOT bituminous engineer.

The foam acts a stabilizing agent for other materials in the mixture like recycled asphalt.

Developed in Iowa in the fifties, foamed asphalt was set aside due to lack of practical production equipment. In the 1970s, however, a European firm refined Iowa’s idea and manufactured workable field equipment.

Since 2000, Iowa contractors have used the new technology to produce foamed-asphalt stabilizing agent for both cold-in-place and full-depth reclamation projects.

### New application

In fall 2002, the Iowa DOT used foamed asphalt in full-depth-reclamation of highway shoulders west of Boone on US Highway 30.

Engineers decided to use foamed asphalt as a binding agent because other types of emulsion techniques would add too much water to already wet shoulder material, which could cause construction problems.

“We recognize that foamed asphalt is a viable alternative as a stabilizer and we can use it right now using current pavement rehabilitation strategies,” says Heitzman. “We are taking the foamed asphalt technology and looking for and improving on ways to use it.”

### For more information

For questions about foamed asphalt, contact Mike Heitzman, Iowa DOT bituminous materials engineer, 515-239-1003, michael.heitzman@dot.state.ia.us. •

## Precast concrete light pole bases

GREG BENEDICT, traffic control technician with Mason City, Iowa, has used precast concrete light pole bases for over a year and is pleased with the technology.

“I order a hole, and the base is up and running,” he says.

The bases come with a bolt cage and conduits for grounding, making installation quick and easy.

The specifications match those for poured bases. The precast bases, however, can be installed when weather prohibits pouring concrete.

For more information, visit [www.iowabase.com](http://www.iowabase.com). •

*Photos courtesy of Michelle LaRue, Iowa Base, Inc.*



Precast bases come ready with a bolt cage and grounding conduits for fast and easy installation.

