

## Idea Exchange

### Gravel retriever saves work, money

A new attachment for a grader with a wing plow set-up will retrieve a good windrow of gravel from ditches, according to an article in *Transearch*, a newsletter from Alberta Transportation and Utilities.

The retriever, manufactured by Shortline Fabricating of Rosebud, Alberta, (about \$8,000 (CAN) in 1992), pulls gravel out of the shoulders with few lumps and little grass, saving labor and making it quicker and easier to work.

Fall just before freeze up and spring when the shoulders have dried are good times to shape shoulders and bring back lost gravel.

*For further information contact Jim Ullery, General Foreman at 403/297-6311 in Calgary or Don Haase at 403/734-3877 in Gleichen. From the December 1994 issue of Transearch.*

### Single rope makes rumble strip

Also from Alberta comes this idea: stretch a single 2 inch diameter rope across the road to warn motorists they are approaching a work zone. It generally takes less than a minute to set up the rope by securing it to two stakes driven into the shoulder of the road. It is placed approximately 200 meters from the work zone. The Medicine Hat, Alberta, staff have been using it successfully for applications such a crack sealing where several set-ups are required in a short period of time.

### Latex paint working well

Using latex paint for pavement marking has been proposed to reduce air pollution and cut hazardous wastes and toxic exposures. Latex has a life that is equal to and sometimes greater than alkyd paints. Recent improvements have made the product nearly as quick to set up as alkyds. In addition, latex seems to retain reflective beads better.

"We also like it because the cleanup is much easier," says Lyle Falk, Ozaukee County Highway Patrol Superintendent. They switched to latex about four years ago when he had to buy a new lane striping truck. "You have to adjust a little and fine tune it," Falk says. And you have to consider the weather. When humidity is high and temperatures low the paint takes longer to dry. Dry weather can cause paint build up on the nozzles.

Because the paint is water based and highly alkaline, all tanks, valves, piping, etc. should be stainless steel. Other equipment adjustments are needed as well, such as diaphragm-type pumps, higher pot and atomization pressures, greater nozzle openings, and lower heating temperatures. All striping equipment must be flushed

thoroughly because dried water based paint is very difficult to remove.

For small jobs like marking RR X-ings and crosswalks, Falk is using a stencil and a conventional house-painting roller. "It's a lot cheaper to throw away a roller than clean up the spray equipment," he says.

*For more information on waterborne paints contact Lyle Falk at 414/284-4426. Thanks also to Scott Plouff of TAPCO for contributing to this article.*

### Reverse bucket configuration for easier culvert cleaning

When culverts are plugged by debris or beaver dams, they are hard to clear by ordinary loader bucket or shovel without causing damage. Steve Nording, an equipment operator in High Level, Alberta, built a bucket that was round and installed in reverse configuration. It reaches into the culvert and cleans it without damage. It saves labor, too. On one job the backhoe cleaned culvert ends



in two days that would have taken a over a week with hand labor. The first prototype cost \$1600 (CAN) to build, but Nording estimates that a second bucket would cost only \$350-\$400 (CAN).

*For more information contact Brad Papirny, High Level Maintenance Foreman at 403/926-3208 or Terry Hood at 403/926-2241. From the December 1994 Alberta newsletter Transearch.*

**Do you have an idea to exchange? Have you designed a gadget or found a new way to do something that other highway people can use? Use the form on page 7 to let us know, or call Don Walker or Steve Pudloski at 800/442-4615.**

### Crossroads

A newsletter providing information on roads and bridges to local officials, published quarterly by the Transportation Information Center, located at the UW-Madison, Dept. of Engineering Professional Development, 432 N. Lake St., Madison, WI 53706. Phone: 800/442-4615. Fax: 608/263-3160.

Don Walker ..... Director  
Lynn Entine, Lynn Entine Writing & Editing ..... Writer & Editor  
Susan Kummer, Artifax ..... Graphic Artist  
Mercy Ranum ..... Program Assistant