

Idea Exchange



Backhoe converted to roadside mower

"Like most rural towns, we have a limited equipment budget," says Chuck Sleeter, Chairman of the Town of Nashville near Merrill, Wisconsin. "We can't justify purchasing a mower tractor for two weeks work each year, and it is increasingly difficult to contract our mowing out."

Instead, they decided to buy a backhoe that could perform a variety of functions. For \$26,000 they were able to buy a used 426 Cat backhoe 4x4 with extended boom. Mounting a McKenzie Wood Chuck rotary mower to the end of the stick turned it into a powerful mower tractor.



"We can use it all year round as a loader-tractor-backhoe and mower tractor," says Sleeter. "We can even use it for heavy brushing by planting the down-riggers and extending the stick."

Finding the right size backhoe with a large enough hydraulic pump system was important. It was also important to get a mower deck compatible with the backhoe's systems. Town employees did the equipment installation, using a mower priority Hammer Kit on the backhoe and a Kwick Hitch on the mower deck.

"We didn't cut any corners in equipping our machine," says Sleeter. "Since we can use the machine for three different functions, the \$26,000 total amounts to about \$8,500 per function, less than one over-sized lawn tractor."

For additional information call chairman Chuck Sleeter, Town of Nashville, 715/484-8166.

Underdrains extend pavement life

When city engineers noticed that asphalt pavements were deteriorating faster at low points, they decided to try underdrains. "It adds about \$3000 per low point, or about 1.5% of the project cost," says Rob Phillips, Deputy City Engineer in Madison.

Most of the city's soils are poor-draining clays, so when water gets into the street base through pavement cracks or by infiltrating terraces, it tends to stay there. To help move that water, the city now routinely lays six-inch perforated pipe in eight-inch-deep trenches under the curb and gutter. The pipe collects water and directs it into the storm drains.

The trenches, which are lower than the street's base course, extend for about 75 feet in either direction from the low point. The city uses geotextile filter fabric to wrap the trench and also lays it under the pavement base in the area. The pipe is surrounded with #2 gradation aggregate as specified by WisDOT (section 501.3.6.4.5). The city is following the WisDOT standard specifications for underdrain (section 645.2.2).



In addition to reconstruction projects, the city also requires underdrains in new subdivisions, providing developers with a standard detail showing the specifications.

"We feel it's going to help," says Phillips. "We've only been doing it since 1995, so we can't yet say 'this road would have looked a lot worse at this point.'"

For information contact Rob Phillips, 608/266-4090 or e-mail rphillips@ci.madison.wi.us. Consult the T.I.C.'s **Drainage Manual** for help in evaluating drainage along roads and streets.

Alerting citizens to sign vandalism hazards

Last fall, vandals removed signs two weekends in a row—stop signs as well as street signs—in the Town of Dodgeville and on local county roads.

"Our road patrolman was frustrated and worried," says Laurie Maloney, town administrator. "He wished he could get the word out to the public about how stupid and dangerous it is to remove stop signs."

Since school was just getting ready to start Maloney thought a letter to the local paper might get some attention. The letter appeared in the Dodgeville Chronicle where the letters to the editor section is very popular, Maloney says.

"Nearly every week something in the op ed is a topic of discussion around town," she says. "I wanted to let teachers know you can get a video on it. I also thought parents could talk about it at the dinner table." The letter provoked some comment, Maloney reports. Since the most commonly stolen signs are for "Lover's Lane," the town council is considering a name change to remove the attraction.

A video, *Danger Signs*, reports on a Florida traffic fatality that resulted from a stolen stop sign. It's useful in driver's ed classes or other public presentations—especially when local streets and law enforcement officials talk about safety. Also, take time to write or call the local media when sign vandals hit your area.

Danger Signs, 9 min., video #18326, loaned free from T.I.C. and county Extension offices.

Crossroads

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