

eward Township, located in the state of Illinois, has replaced their motor grader with a new Hitachi ZW180-6 wheel loader.

"We bought the Hitachi loader last summer after months of researching what our needs and budget would fit," says Anne Vickery, highway commissioner for Illinois' Kendall County.

Jason Vickery, the township's road supervisor (and Anne's son), says the decision to dispose of their motor grader and replace it with new equipment was driven by the loss of gravel roads in the township.

"When we bought the grader, we had more than 36 miles of gravel roads that needed attention. Now, we have only one. The grader got a lot of use for a

while. However, in 2003, our township experienced significant growth and we began to pave our roads. Grader use fell year over year," Anne says.

In winter 2018, the township began searching for a more versatile piece of equipment. They put out a request for a quote to four heavy equipment manufacturers. "We reviewed specs and demo'd the loaders when possible. Numerous times, features that came standard on the Hitachi were add-ons on competitive equipment," Anne says. In the end, they purchased a loader from Illinois Truck and Equipment located in Morris, Illinois.

"We appreciate the size of the bucket; we can now load salt into trucks more quickly. Its power allows us to lift heavy culverts, rocks and mounds of dirt with ease. Our other equipment doesn't have the power or capacity to perform

some of the jobs we need completed. Oftentimes, we found ourselves having to rent larger equipment or borrow from another township to complete a project. Overall, the Hitachi loader makes our jobs easier and safer," Anne says.

Hitachi to the rescue

Seward Township uses the ZW180-6 for snow plowing, truck feeding, lift and carry, and light earthmoving applications. A hydraulic quick coupler allows for the quick exchange of attachments. "With the loader, we also remove and replace large culverts, move huge rocks, remove fallen trees and other debris from the road after floods and major storms," Anne says.

Shortly after acquiring the ZW180-6, the township added another and unexpected application to the machine's repertoire: rescue.

Flood waters swept a car and its driver into a creek. "The young man was standing on top of his car while it was still moving through the water," recalls Anne. "Our township's Emergency Services contacted Jason, who was able to pluck the young driver off the top of his car with the bucket. Now that's versatility!"

Increased power and fuel efficiency

"The machine's new Tier 4 Final Cummins engine does not require a diesel particulate filter, thereby reducing fuel consumption and maintenance costs," says Nick Stipanovich, sales representative for Illinois Truck and Equipment.

The machine's selective catalytic reduction system uses a simple diesel exhaust fluid system for efficient operation without high engine temperatures. Eliminating the diesel particulate filter components with the SCR system also opens working space in the engine compartment for easier access.

An automatic power-up function responsively increases engine RPM when the loader slows down due to uphill travel. An auto shutdown feature provides fuel and emissions savings.

Overall, the Dash 6 model boasts a 7% fuel reduction in V-shape loading and 5% fuel cost in load-and-carry operations.

The transmission is automatic and features a proprietary excavator style load-sensing system. This feature, coupled with a work mode selector, helps deliver the right amount of power for the application. A shift-to-hold switch provides extra traction or torque by overriding automatic transmission settings to maintain the current gear until the switch is pressed again.

"A standard limited slip rear axle helps the operator maintain constant control of the machine and focus on the task at hand," Stipanovich says.

Cab enhancements

The loader features a rollover protection system, enclosed cab with sound suppression, great visibility, market-leading technologies and intuitive controls.

"Rear-view cameras on equipment is essential nowadays and we appreciate the productivity and safety advantages we gain from having 360 degrees of visibility courtesy of the expansive glass and rear-view camera," Jason says. "The camera pans out wide and lets us see objects and people located close to the rear of the machine and low to the ground. Lines on the in-cab screen mark out every five feet, which aids in safer and faster machine positioning."

A proximity detection system provides audible and visual alerts for stationary and moving objects up to 20 feet away from the loader.

The single, pilot-assisted control lever and an auxiliary function lever plus the in-cab operator-friendly LCD color monitor provide intuitive controls. The monitor displays useful information at a glance, such as fluid levels, oil temperature, power mode and images captured by the rear-view camera.

Technology reveals hidden data

To help maximize productivity, Hitachi provides ZW180-6 owners with a lifetime subscription to Hitachi's Global e-Service remote monitoring solution. It allows for remote monitoring of the equipment via Owner's Site, which provides 24/7 online access and ConSite, a precise asset management suite of tools that helps owners extract maximum value and peak productivity on the job. Detailed data reports on working hours, fuel consumption, operating mode ratio and maintenance scheduling are immediately available. With this real-time data, owners can make more informed decisions, especially when it comes to:

- · smart machine deployment
- · identifying cost savings opportunities
- · identifying equipment operator training

- opportunities
- maintenance planning and prolonging machine life
- · project management

A winter warrior

Snow removal is the wheel loader's primary task, so it is essential that the machine be optimized for working in the snow.

The Hitachi ZW180 comes equipped with a strong heater, an optional heated seat, and optional cold start feature via an air intake heater. Front and rear wipers and washers keep glass clean in snowy weather. "Plus, large, heated mirrors give a better view even in winter," Jason says.

Machines engaged in snow removal applications work morning, noon and night. Seeing and being seen are essential to safe, efficient operation. "We added additional lighting for safe operation at night and in low light environments. Drivers and pedestrians need to be able to see us, and extra lighting is a great help," Jason says.

To clear roads of snow, Illinois Truck and Equipment introduced the township to AMI Attachments Reactor Wing Blade. The attachment features a quick attach on both the front angle blade and wing blade so each blade can be used in tandem or individually — an industry first.

"The Hitachi ZW180 in combination with the AMI Reactor Wing Blade is essentially two valuable machines in one," Stipanovich says. The ZW180 performs as a conventional wheel loader during the mild season but transforms to do the plowing work previously required of a grader. The Hitachi ZW180 open center load sensing hydraulic system along with standard third valve hydraulics made the integration of the AMI wing very straightforward.

"We have yet to test it in a major snow event but have no doubt with the power of the machine and the plow attachments, it will be more than adequate for the job," Anne says.