

# GOVERNMENTAL SOLUTIONS

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## PARADIGM SHIFT

BACKHOE DESIGN HELPS TOWNSHIP WORK FASTER

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### WORK IN TIGHT SPACES

MOTOR GRADER ARTICULATION BENEFITS

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**CATERPILLAR**<sup>®</sup>



# ADVANCED TECHNOLOGY IMPROVES PERFORMANCE

## NEW NEXT GEN SMALL WHEEL LOADERS

New Cat® Next Generation 926, 930, and 938 Wheel Loaders have advanced technology that simplifies machine operation and improves performance.

Exclusive adaptive-engine-RPM feature automatically adjusts engine speed based on operator input, reducing fuel burn and improving productivity. Systems are optimized and sized for greater fuel efficiency in the 1,200-1,500 RPM working range. Larger, slower speed pumps reduce wear and extend service life.

Four customized powertrain options are available on these loaders.

- Utility mode is designed for hydromechanical tool use or pick-and-place applications, with implement power and quick speed for fine ground speed control and engine RPM throttle lock.
- Torque mode provides up to 5 percent in fuel savings by 'freewheeling' around corners, and on downhills.
- In Hystat mode, the loaders feature engine braking with aggressive deceleration, acceleration, and no travel until the throttle is applied.
- Finally, in Ice mode for snow-clearing applications, soft directional shifts and extended coast-out are implemented for better control.

Cat Payload is standard with a 250-hour demo mode to test before subscribing. Payload provides on-the-go weighing to help operators hit exact targets and avoid material overloading, underloading, or misloading.

Simple in-cab pushbutton kickout settings for upper, lower, and tilt match bucket position to the task, helping maximize cutting edge life. A new bucket shake feature controlled by a joystick button provides precise materials metering during batching, spreading and bucket cleaning.

### Cab update enhances safety, comfort

Incorporating automotive styling and amenities, the new cab increases operator comfort and improves visibility for added safety. Smaller cab pillars, increased window area, heated and electric rearview mirrors with lower parabolic, and standard rearview camera improve operator visibility. New options include a multi-view camera for a bird's-eye view around the loader. Rear object detection with visual and audible alarms provides additional rear alerts.

The customizable in-cab display delivers an easy view of operating parameters. Using Operator Profiles, up to 50 operating profiles can be set through the display, which the loader can recall when an operator starts the machine. The Next Gen Loaders have two steering options—new force feedback joystick steering of a low-effort steering wheel. New joystick steering enables the loaders to travel up to 25 mph as a result of the force feedback feature that stiffens at higher speeds and softens as speed decreases.

**To learn more about new Cat® Next Gen Small Wheel Loaders, contact our dealership. 📞**

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**CAT.COM/GOVERNMENTAL**

Includes complete specifications for all machines. Check this out and more at **Cat.com/governmental**.

# GREAT LANDFILL MATCH

## D5 WASTE HANDLER

The Cat® D5 Dozer succeeds the renowned D6N with superior performance, a fully automatic transmission and an industry-leading choice of technology features that help you maximize productivity. Nimble and responsive, the D5 provides outstanding power.

Stronger structures provide more durability and uptime, while a purpose-built push arm dozer helps you take on the rigors of harsh waste applications.

The Waste Handler package helps protect both machine and operator. Specialized guarding, striker bars and seals help protect the machine from impact, wrapping and airborne debris. Cooling is designed for easy cleanout. The cab is designed for high impact, and specialized air handling features help deliver cleaner air to the machine. Landfill blades and center-hole track shoes that eject debris help optimize productivity.

### Next Generation Performance

Harness more weight and horsepower to take on a wide range of waste handling tasks. A fully automatic 3-speed transmission gives you seamless acceleration, faster cycle times and more nimble movement. No need to shift—just set your desired ground speed and the dozer adjusts for maximum fuel efficiency and power to the ground. A completely redesigned, more spacious cab sets new standards in comfort and productivity. More glass area and a steeper hood angle provide 30 percent better forward visibility.

### Added Machine Protection

Impact resistant polycarbonate cab doors and solid side windows provide improved pressurization. A powered air pre-cleaner helps keep cab air cleaner and pressurized for

greater operator comfort. A variety of optional filters are available to customize filtration capabilities. Also:

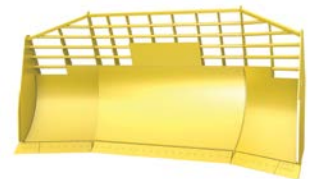
- Fuel tank, cover guard and heavy-duty bottom guards shield major machine components.
- Internal sealing keeps the trash away from the inner compartments.
- Rear striker bar helps protect against trash climbing up the tracks.
- Guarded final drives provide added protection against wrapping and impact.
- 12 premium LED lights illuminate the work area.

### Ease of Maintenance

An automatic reversing fan enables easy cleanout access. A trash-resistant radiator, with 6.4 fins per inch, helps reduce plugging. A quick-access cab floor option provides tool-less access to the floor plate opening. An optional air cleaner with turbine/screen delivers cleaner air to the engine.

### Equipped for the Job

Landfill blades are equipped with a trash rack to increase capacity. The Heavy-Duty Extended Life (HDXL) undercarriage includes Kevlar® guarded, sealed idlers to help prevent debris such as wire, string and plastic bags from wrapping into seals, and center-hole track shoes help eject debris.



**To learn more about the D5 Waste Handler, contact our dealership. ☎**



# VERSATILE PAVING SCREEDS

## WIDE RANGE OF MAT WIDTHS

New Cat® compact asphalt pavers and screeds have been added to the Paving Products family. These standard 8-foot size-class paver and screed combinations include the AP400, AP455, AP500, and AP555 asphalt pavers and the SE47 V and SE47 FM screeds. The compact size and small footprint provide exceptional maneuverability for paving in confined areas.

The Cat SE47 V Vibratory Screed with rear-mounted extenders provides stability, easy set-up, and a versatile paving range, making it the perfect match for urban streets, parking lots, rural roads, and many other mid-sized paving applications.

The standard paving range of the SE47 FM screed is 8 ft. to 15 ft.-6 in. with a maximum width of 20 ft.-6 in. provides excellent performance when changing paving widths for both urban and highway paving applications. Paving depths up to 10 in. support aggregate laydown.

### Quick Adjustment

- Screed operating consoles are equipped with mix height adjustment for the augers, providing the ability to modify material flow. When equipped with Cat Grade Control, conveyor ratio adjustments and conveyor material height adjustments can be performed through the display.
- Auger and tow-point height adjustments provide versatile setup options for the screed operator
- Power controls for extender slope, height and screed crown enable quick mat profile changes.

- Trailing-edge screed plate adjusters help maintain an even plane across the width of the screed.

### Smooth Material Flow

Screed plate depths of 12.75 in. on both the main screed and extenders provide stability and good mat textures. The proportionally sized auger chamber and rear-mounted extenders provide smooth material flow for consistent mat quality. The proportional extender control provides smooth adjustment when transitioning paving widths. A heated end-gate option helps prevent material from sticking for better edge profiles and joint-matching capability.

### Quick Heat, Even Distribution

Belt-driven, tractor-mounted generator delivers fast heating screed plates for quick starts. Electric heating system with zone monitoring helps ensure even heat distribution and smooth asphalt textures, while also enabling heating to continue in the event of a temperature sensor failure.

### Simple Operation

Proportional extender control provides smooth adjustment when transitioning paving widths. Screed operating consoles are equipped with mix height adjustment for the augers to modify material flow.

**To learn more about Cat® compact asphalt pavers and screeds, contact our dealership. ☎**



# WORK IN TIGHT SPACES

## MOTOR GRADER ARTICULATION BENEFITS

Articulation makes your motor grader stand out compared to most other heavy machines on your jobsites. Unlock your motor grader's versatility by learning how and when to articulate the frame and lean the wheels. With these functions, you can work accurately and efficiently in tight spaces.

### How to use frame articulation

You can articulate your Cat® motor grader's frame to shorten its turning radius. This makes working around sharp turns, tight corners and stationary objects much easier. Also articulate the frame to:

- Counter side draft from large windrows and blade loads
- Change moldboard cutting width
- Reduce blade loads without using your circle
- Steer the leading end when reversing.

### Auto articulation

Joystick machines have automatic articulation as an optional feature that syncs the frame's articulation with the steering of your front tires.

With auto articulation, you no longer need to twist your joystick to articulate your Cat motor grader's rear frame. This helps reduce wrist fatigue and potential injury, while simplifying steering.

### Benefits

- Improved maneuverability in tighter working spaces
- Simplified operation in tight-radius applications
- Assistance when performing three-point turns

### How to set up Auto Articulation

1. Disengage the parking brake.
2. Unlock the implement lockout switch.
3. Auto articulation features a three-position switch: forward-only mode, off mode (neutral position), and forward/reverse mode.
4. Auto articulation is active in forward gears 1-4 and reverse gears 1-3.
5. It disables when you power off your grader and needs to be turned on again when you restart.



### Using Auto Articulation

To use this automation, just steer the motor grader as normal and don't worry about making any extra movements with your hands. The rear frame

automatically follows the steering angle within the full range of steering, increasing the maneuverability of the motor grader and reducing both the turning radius and tire wear.

This feature is especially helpful when grading on sharp curves, or in situations where encountering structural obstacles and turnarounds such as cul-de-sacs, meaning faster cycle times and increased productivity in tight spaces. And three-point turns are more seamless than ever.

Your motor grader is factory-equipped with a 500-hour demo. If you like auto articulation, contact our dealership to fully activate this feature at an additional cost for the entirety of your motor grader's life.

### Manual operation

Of course, operators can still articulate manually if they wish. Manual inputs suspend auto articulation. To re-engage it, simply realign the steering angle with the articulation angle. Simply twist the joystick left and right to articulate the frame.

Find the articulation gauge on the monitor or gauges display and note the articulation centering button on the right side of the joystick. If operating in a lever machine, note the location of the articulation lever.

### How to use motor grader wheel lean

The top of the front wheels are normally leaned in the direction that the material comes off the moldboard. Use the motor grader's joystick or lever to lean the front wheels.

Wheel lean shortens an articulated grader's turning radius and can make your machine handy in different ways. For instance, use wheel lean to help prevent sliding on slopes. This is especially effective when working in mud or sand.

The wheels can also be leaned to reduce tire sidewall damage when making ditch cuts by leaning against the side draft. And it's an easy way to make slight steering corrections during finish grading or to vary the depth of the cut when using the moldboard in a high-bank position. It also increases slope angle capability when cutting high or ditch back slopes.

Always lean the front wheels opposite to the direction of the turn when backing up. When turning at the end of a pass on a narrow roadway, a good practice is to back into the ditch, keeping the front wheels on the road. The traction and crawling action of the oscillating tandem drive wheels enable the rear end of the grader to readily cross the ditch, leaving the front wheels on the road surface where they are easily steered.

Download the Cat Inspect app to digitally note your motor grader's maintenance history. And always refer to the Operation and Maintenance Manual for guidance on maintenance, safety, settings, features and more.

**For Cat Motor Grader service or other needs, contact our dealership. 📞**



# TRANSFORM YOUR MINI EXCAVATOR

## NEW TILT ROTATE SYSTEM

The Cat® Tilt Rotate System (TRS) is an exclusive, fully integrated solution that transforms your 3- to 10-ton Next Gen Mini Excavator into a do-it-all machine. The mini excavator TRS system can help you work around obstacles without repositioning your machine.

### 360° of Continuous Rotation and 40° of Tilt

The new TRS4, TRS6 and TRS8 models enable attached work tools—including buckets, forks, grapples, brooms and compactors—to rotate 360 degrees and tilt 40 degrees side-to-side. Your machine can reach more work areas from a single position while maneuvering tools over, under and around obstructions when excavating, grading ditches, sorting recycled materials or placing pipe. This also minimizes machine repositioning, boosting convenience, improving safety and saving time and fuel.

### Integrated with Display

You can seamlessly view rotation and tilt degrees as well as coupler activation, control settings and bucket shake settings with the existing machine display.

### Coupler Compatibility

TRS models have two interfaces: A top interface that connects the TRS to the carrier, and a bottom interface that connects various work tools to the TRS.

The TRS4, 6, and 8 can be configured with a pin on top, or an S-type top. The lower interface can either be Cat Pin grabber, or S-type. These can be mixed and matched;



you could select a pin on top and an S-type bottom. The integrated grapple is only compatible when the TRS has the S-type lower interface.

### 6- to 10-Ton Next Gen Machines are TRS Ready

The TRS4, TRS6 and TRS8 are compatible with Cat Next Generation mini excavators. TRS6 models are designed for the 306 CR. TRS8 models using the S-Type coupler for both top and bottom interfaces fit models 307.5, 308 CR, 309 CR, and 310.

Additionally, all Cat TRS systems can be installed by our dealership in as little as four hours. That's a fraction of the time and expense required to install a non Cat tilt rotator attachment.

**To learn more about the many benefits of the Cat Tilt Rotate System, contact our dealership.** 📞



# BUILDING THE IMPOSSIBLE

CATERPILLAR ENGINEER HELPED BUILD THE ALASKA HIGHWAY



When it comes to providing the know-how and brawn that moves mountains, it's a good bet that Caterpillar associates and machines will somehow be involved.

Tom Logan was an engineer at Caterpillar when he enlisted in the U.S. Army during March 1942, after the start of World War II. Tom spent four months of duty working on the Alaska Highway—constructed during the war as a military transportation route connecting Alaska with strategic continental defense bases.

The highway had been commissioned earlier that year by President Franklin D. Roosevelt in cooperation with the Canadian government, and originally cut through 1,700 miles of rugged wilderness. It was built in eight months by crews working at an astonishing pace from both the northern and southern ends. Building the highway was considered the biggest and most challenging engineering project undertaken since construction of the Panama Canal.

Construction of the Alaska Highway officially began March 11, 1942, about 90 days after the bombing of Pearl Harbor. The initial shipments of construction equipment came by boat into the port of Valdez and by air to the various Northwest Staging Route airfields. These first shipments consisted of 174 steam shovels, 374 blade graders, 904 tractors and more than 5,000 trucks. These also included countless bulldozers, snowplows, cranes and generators. Logan later said 1,850 of the 2,200 dozers on the project were Cat machines. Two-hundred and fifty thousand tons of materials and 10,000 soldiers began the leap-frog construction of the road.

## Grueling conditions

The crew was on a tight deadline, and the environment was “raw, crude and ruthless,” Logan said. The soldiers worked ahead of the machines, often in brutally cold temperatures. Historical accounts say

drinking water froze solid, diesel thickened, and ice could lock up the wheels of a truck if it stood still for more than a few seconds.

In less frigid conditions, the soldiers laid down timbers so the swampy ground could support heavy equipment. Once the swampland ended, swift-moving streams or lakes appeared, requiring the team to construct permanent bridges. Along the way, they converted raw lumber into bridge timbers, piles, and corduroy road materials. The spring brought melting snows and torrential rains, and summer weather ushered in the arrival of mosquitoes and biting flies.

The crew worked 14- to 18-hour days, seven days a week and ate fish and game they hunted along the way. Logan was one of only seven men in his platoon with experience operating heavy construction equipment. As a motor officer, his primary job was to keep his crew's machines—including 18 D8s and 20 D4s—running in mud, rain, and deep snow.

“Generally, I was familiar with the equipment—right at home, in fact,” Logan recalled. “Men pushed the machines to their utmost power, and the machines responded. Through wooded expanses, our tractors pushed and uprooted millions of board feet of jack pine and spruce. Trees were converted readily to our needs for timber for bridges and corduroy roads. The ‘Cats’ seldom cooled their engines unless laid up for repair. In such cases, I had to see they ran again.”

## The rest of the story

The highway was officially ready for military use later in 1942. Logan's crew had been the last of seven road-building regiments to arrive at the jobsite, yet finished the assignment in the shortest time. Cat equipment helped open the highway for public use six years later in 1948.

After Logan completed his military service, he rejoined Caterpillar and worked in the purchasing department until his retirement in 1976. ☞





# PARADIGM SHIFT

## BACKHOE DESIGN HELPS TOWNSHIP WORK FASTER

For those looking to escape the rigors of urban living in Newark and New York City, Cedar Grove Township became one of many destination suburbs in northern New Jersey during the 1950s and '60s.

Named for the eastern red cedar trees that once covered its valley and hillsides, Cedar Grove Township (pop. 13,314) is a family-oriented community with good schools, stable taxes and a solid public works department.

Last year, the township acquired a new Cat® 432 Side Shift Backhoe Loader primarily for conducting water and sewer projects.

"We were seeking a side shift machine and had been looking at another brand," said Pete DiGeronimo, the head mechanic for the Cedar Grove public works department. "I wasn't aware that Caterpillar had a machine like this, and in talking to our dealer rep at Foley Cat, he told me that they were popular machines in Europe. We looked at the ratings and the favorable pricing through cooperative purchasing, and it turned out to be a very good fit."

Caterpillar recently reintroduced three side shift backhoes to the North American market. The side shift backhoe is designed for versatility and increased efficiency when working in tight spaces. A carrier frame is mounted on the rear of the loader. The backhoe's kingpost is mounted to the carrier frame, enabling it to slide back and forth along the rear of the machine while still being able to pivot side to side.

On the Cat 428, 432, and 434 models, this sliding mechanism is activated from the cab by pressing a button.

### A smaller footprint

Unlike a center pivot backhoe, where the stabilizers extend from the frame diagonally and come to rest outside of the tractor's footprint, side shift stabilizers are integrated into the carrier frame and extend straight down to the ground, thereby reducing the machine's footprint. This enables the operator to work in tight spaces, or alongside a wall without having to move.

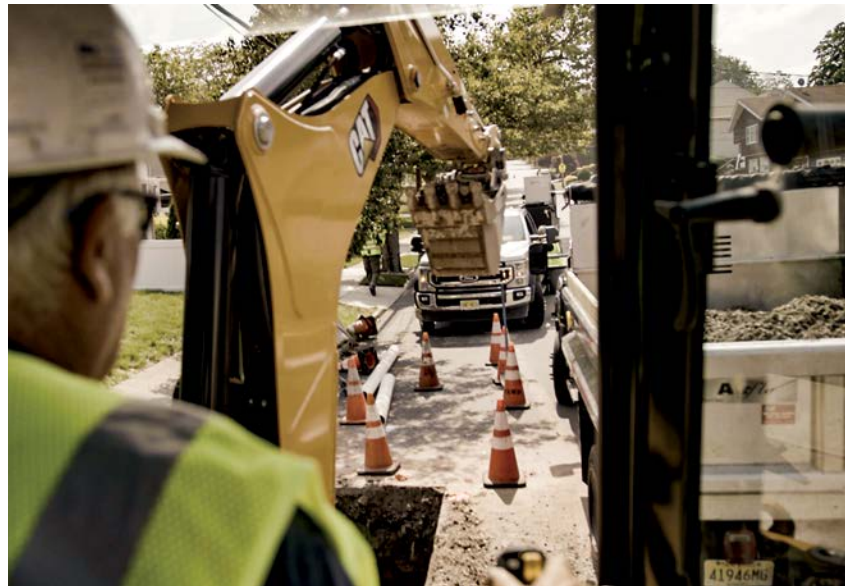
DiGeronimo says the biggest advantage of the Cat Side Shift Backhoe is the machine's smaller footprint,



**“The side shift is fantastic for utility work. It has a narrow footprint when you’re working in the roadway. It minimizes traffic disruption, which is our number one priority.”**



**– PETE DIGERONIMO**  
Head Mechanic  
Cedar Grove Public Works Department



enabling it to perform road jobs with less impact on traffic flow.

“The side shift is fantastic for utility work,” DiGeronimo says. “It has a narrow footprint when you’re working in the roadway. It minimizes traffic disruption, which is our number one priority.”

“Just last week we were able to do what we call a ‘single-lane shift’ on a county road because of the narrow footprint with the Cat Side Shift Backhoe. This saved us and motorists aggravation,” DiGeronimo said. “And it saved money for the township. We started working sooner and finished faster because we didn’t have to keep shifting the traffic flow around.”

Instead of having to reposition the machine, which would be necessary with a traditional center-pivot backhoe, the side shift enables the boom to slide left or right and be repositioned while the machine remains in a fixed position.

“It’s a game changer for what we do,” adds Cedar Grove sewer mechanic Dave Burdett, who has 40 years of experience operating equipment. “When we’re

working in the road, I don’t have to take up more than one lane with it—it’s invaluable for that.

“If you’re in a tight spot and need to dig under either side of water mains or sewer lines or any type of pipe or obstacle, you have to pick up and move a standard backhoe to the right or left so you can dig parallel with the pipe without the bucket teeth hitting it,” Burdett says. “With the side shift, I can easily shift the boom and at the most I shift the machine six inches over. So, I’m literally sitting in one lane or working on the shoulder, depending on how the utility line runs.”

### **Better visibility**

Increased visibility is another advantage, says David Young, a product application specialist with Caterpillar Building and Construction Products.

*(Continued on page 12)*

“Any operator who runs a center-pivot backhoe is always looking around the boom, because the boom is in the middle of the machine and the operator seat is in the middle of the machine,” Young says. “However, on the side shift backhoe, the boom can be shifted to either side so the operator has better visibility to the work area.”

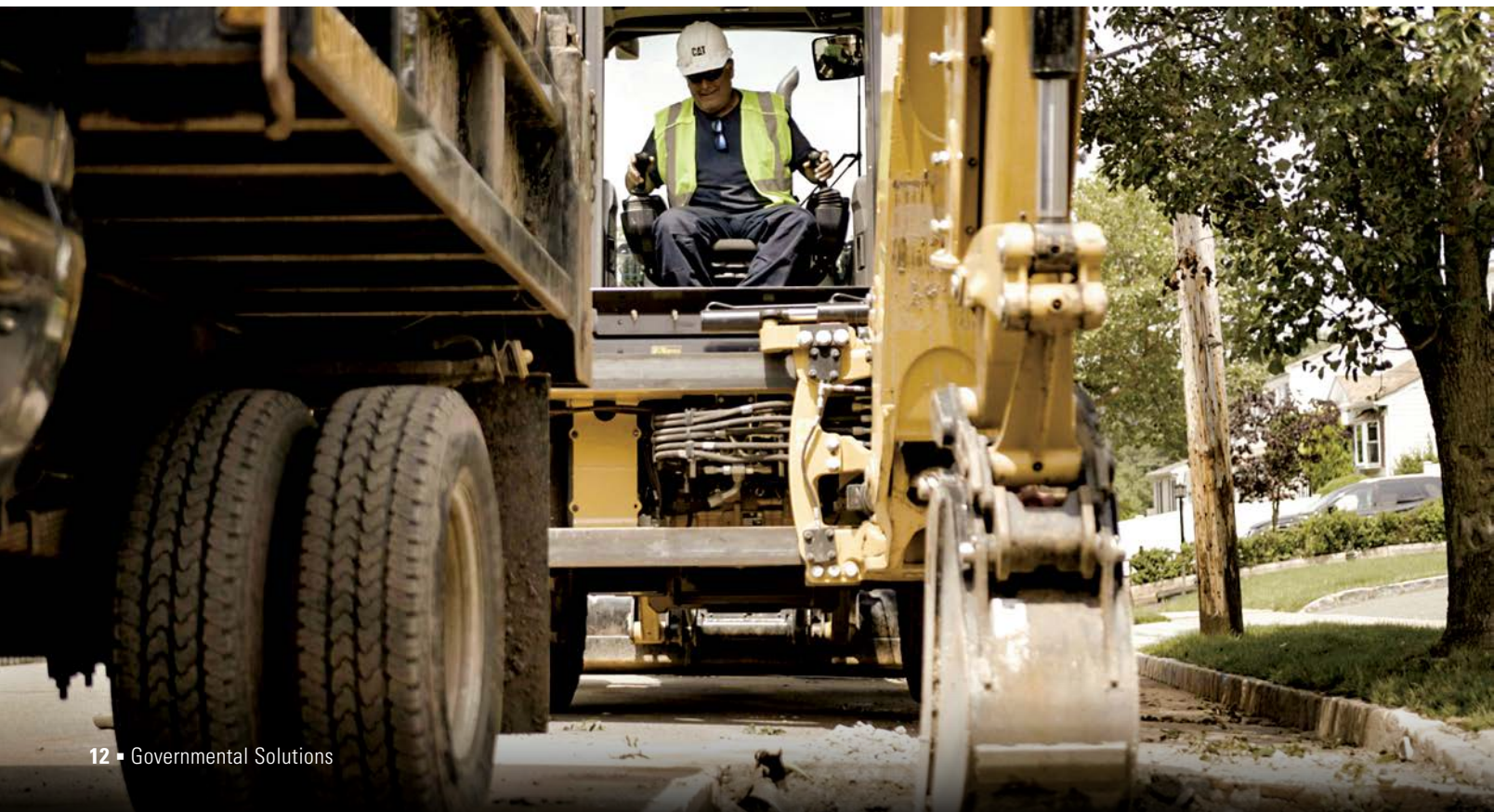
As municipalities move machines from one location to the next, the Cat Side Shift Backhoes are more effective for roading, Young says. The mass of the hoe tucks behind the cab and does not hang further away from the machine as it does with center-pivot machines. As a result, roading balance and ride quality are improved with the side shift setup.

“With a standard backhoe, because the boom extends straight out the back, the machine can start to gallop when moving down the road,” Burdett says. “For inexperienced operators, it could get away from them very easily. Whereas, the side shift backhoe is very balanced. It has more of the weight forward and you don’t get that gallop effect when roading from one location to the next.”

### Ease of operation

A dual mode function enables the operator to control the loader or the excavator—or both at the same time—from any seated position. The operator can spin around in the seat when working forward with a wide bucket, or behind with the backhoe.

“When you’re facing forward in the loader configuration and you need to move the backhoe boom, you can rotate the seat and face the other direction to move the boom if you’re trying to line up over a pipe,” Burdett says.



**“It’s a game changer for what we do. When we’re working in the road, I don’t have to take up more than one lane with it—it’s invaluable for that.”**

**– DAVE BURDETT**

Operator  
Cedar Grove Public Works Department



The LCD display comes standard as a soft key display, or can be upgraded to function as a touchscreen. Through the interactive display, the operator can set up various performance parameters depending on the configuration. This helps match machine performance to operator preference, further increasing productivity and efficiency.

The seat-mounted control setup is a new offering for Cat Backhoe Loader owners available on the 432 sideshift and on center-pivot models (420XE, 440 and 450), the latest generation standard backhoe models. To reduce operator fatigue and increase efficiency, the air-ride suspension seat comes standard with switches and controls ergonomically located within easy reach of the operator. Diff-Lock button, transmission kickdown and auxiliary controls are all located on the loader control joystick, providing power and control at the operator’s fingertips.

“It’s a very comfortable seat, the lumbar support is good and you can adjust the height,” Burdett says. “And the display screen is very good. It’s easy to understand, takes no time to learn and is very intuitive.”

With electro-hydraulic controls, the operator

can customize both the modulation and response rate of the joysticks to achieve the perfect feeling of control. This, as well as the pattern changer, is managed through the display screen. Adjustable aux flow can also be adjusted through the display screen, enabling the operator to perfectly sync the machine with the attachment being used.

“I’ve worked with other side shift backhoes in the past and they were not hydraulic, and it took some maneuvering to get the boom to shift,” DiGeronimo says. “So with this Cat machine being hydraulic, we don’t have to stick a machine out into traffic. Almost all our work involves roads, so taking up as little space as possible is key.”

During the winter months, Cedar Grove utilizes a 10-foot snow pusher attachment for clearing snow. It also utilizes a H65 Hammer for breaking concrete.

“We’re responsible for clearing a couple of big parking lots, and it used to take a few hours to plow them,” DiGeronimo says. “Now it takes half an hour and the lots are cleared. We also have a large hammer attachment we use with this machine. The state highway here has about 10-inches of reinforced concrete under the asphalt, so it’s awesome for breaking that out. We have a lot of water mains under that highway, and we’re out there often.”

### Built to last

DiGeronimo enjoys an excellent working relationship with his Cat dealer sales rep, George Vorreas.

“I have a great relationship with Foley

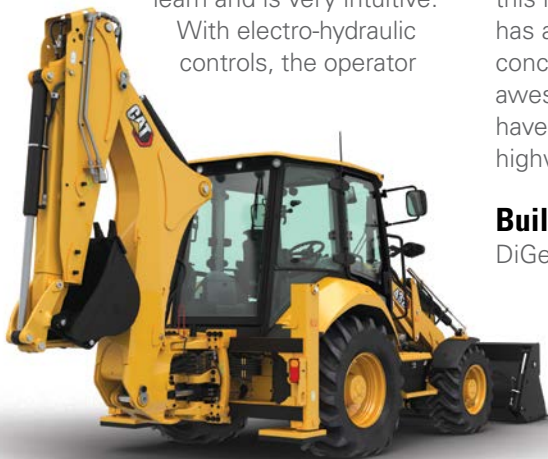
Cat,” he says. “George works with us to handle our needs, including trade-ins. When it comes to our standby generators, we also have a great relationship with a couple of technicians at Foley Power systems. They talk me through some of the computer code stuff, which is great. It’s often a simple answer and just a matter of me doing a reset.”

Burdett and DiGeronimo agree that the 432 Side Shift Backhoe is both durable and dependable, resulting in little to no downtime.

“Being in government, we’re focused on making sure taxpayers get the most value for their dollar,” DiGeronimo says. “A good part of the cost equation involves making sure our agency gets the maximum life out of each machine.

“The 432 is a quality machine that’s built to last for the 25 years we’re expecting to use it—and that makes it sustainable. It’s been a great machine for us.”

For more information, or to set up a demo, please contact our dealership. ☎



## CEDAR GROVE PUBLIC WORKS DEPARTMENT

**Location:** Cedar Grove Township, N.J.

**Population:** 13,314

## CAT® MACHINES

924K Wheel Loader, 432 Side Shift Backhoe Loader

**Attachments:** Multi-purpose Buckets, Forks, 10-foot Snow Pusher, H65 Hammer

# VISIONLINK®

## TRANSFORMING EQUIPMENT MANAGEMENT

Gathering data to provide information you can act on isn't new at Caterpillar. In fact, Caterpillar has been connecting assets and collecting equipment data since the 1990s. As construction technologies have evolved, Caterpillar continues to be at the forefront putting its customers and their needs at the center of its technology solutions.

This is no different with the evolution of Caterpillar's equipment management solution VisionLink®. This year, Caterpillar has rolled out new and improved feature sets within the existing VisionLink platform that offers a scalable, personalized equipment management experience at the swipe of a finger. VisionLink enables you to view fleet information online to make informed decisions that can help boost productivity, reduce costs, simplify maintenance and enhance safety on your jobsites.

### Centralized equipment management

VisionLink provides you with a hub for managing any-size fleet—including Cat machines and other brands—no matter if they are connected or not, and owned, leased or rented. The improved interface enables you to monitor hours, locations, and fuel use, set up maintenance alerts, assign work, request parts or service, and run reports. Plus, it will provide easy access to warranties, work orders, manuals, and service histories.

### Fleet data anytime, anywhere

The VisionLink app for Android or Apple devices is now available for download and allows you to manage your equipment on the go. No matter where in the world or on the jobsite you are, you have access to manage your equipment, view utilization and geofences and any other feature available within VisionLink. Keep your





equipment running at peak efficiency, wherever it's working.

### Easy Communication and Collaboration

With the ability to share data and results across your organization, VisionLink helps to eliminate email overload and duplicate work. With no user licensing requirements, you can share data and results within the tool with as many people as needed. A "Needs Review" function brings essential information and insights front and center, allowing you to quickly review tasks and assign them, resolve or dismiss completed tasks and monitor the progress of tasks assigned to others.

### Advanced fleet management

Ready to take your equipment management to the next level? Within VisionLink you can create custom dashboards with real-time updates. These custom

dashboards enable you to monitor machine health, analyze idle time, make quick, informed decisions, foster communications with your operators and so much more. And all with greater ease than ever before.

### Data-driven success

Today, you must accomplish more work in less time at lower costs to succeed. At the same time, equipment is becoming more complex. Cat equipment management tools and technologies help reduce owning and operating costs in a myriad of ways, including:

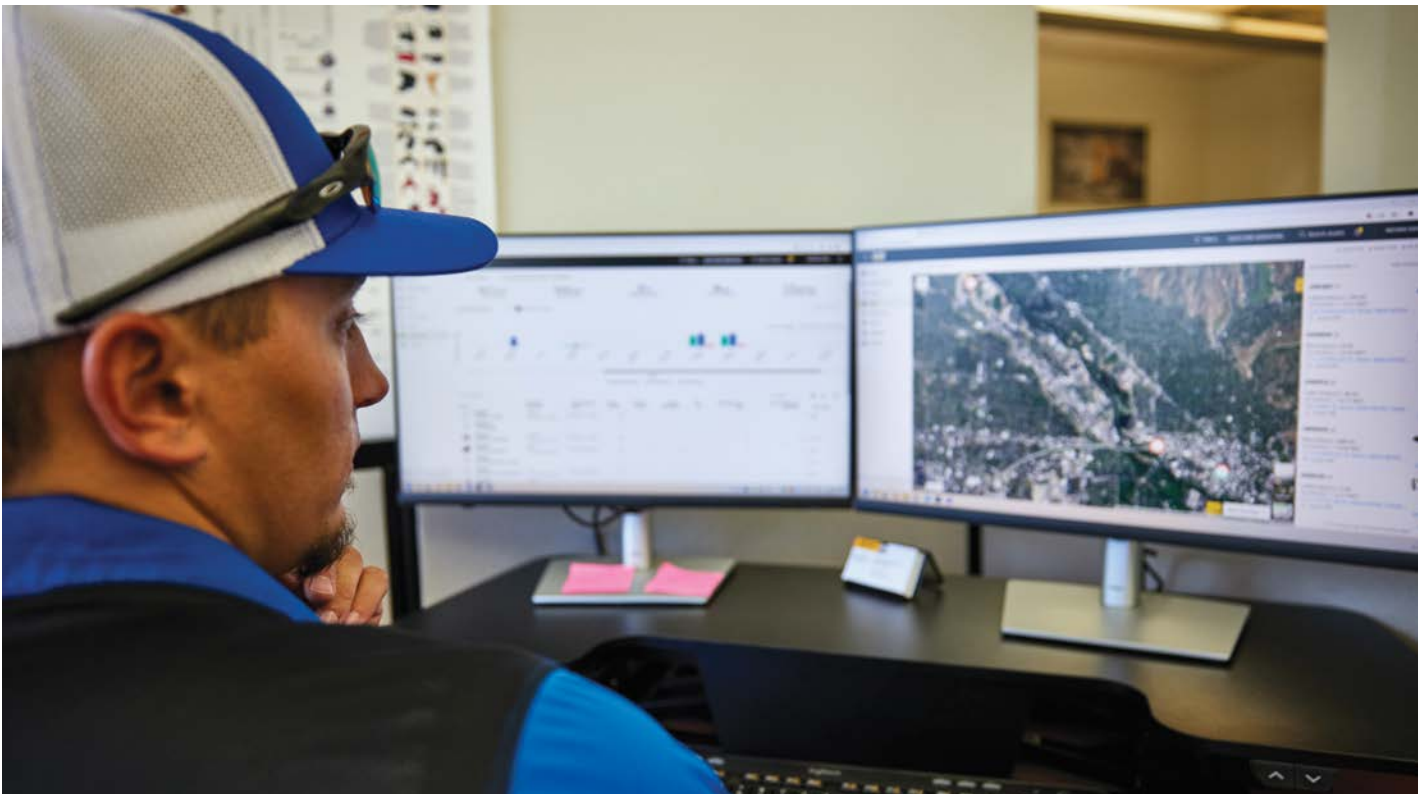
- Identifying small problems before they turn into expensive repairs
- Reducing fuel and labor costs by making well-informed business decisions
- Avoiding unplanned downtime
- Enhancing safety
- Tracking workflow

VisionLink gives you the insights you need to take action.

### The Future of Construction Technologies

As jobsites continue to evolve in the digital age, Caterpillar is committed to investing in solutions that not only turn data into actions, but enable our customers to create a better, more sustainable world.

***To receive a demo and learn how VisionLink® can enhance your operations, contact your local Cat dealer today. 📞***



||| EASY TO OWN. READY TO WORK. |||



You make uptime look easy. Your parts arrive to your door. You're ahead on repairs, your crew stays busy and you get the most from your machine investment.

So, how do you do it? How do you keep machine ownership hassle-free? You don't just buy a Cat® machine — you own it with a Cat Customer Value Agreement (CVA). The right parts deliver right on schedule. Planned maintenance keeps service predictable. You're protected from risks of unexpected repairs due to manufacturer defects. And you get it all in one plan, rolled in with your machine payment.

Hassle-free ownership to maximize your machine — and your uptime.

||| THAT'S A CVA |||

TALK TO YOUR DEALER TODAY