Falls City Engineer

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Unique construction technique used at LOUVAMC

Falls City Engineer

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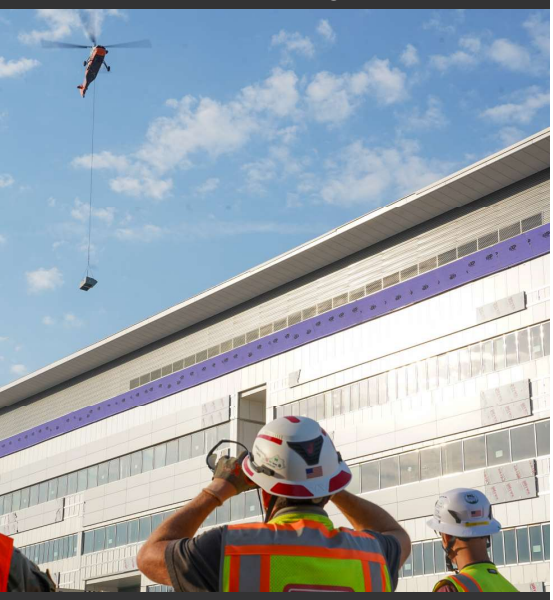

On the cover: A helicopter lift took place on the site of the Louisville VA Medical Center Sept. 20, 2025. During the lift, 59 pieces of equipment were placed on the roof of the medical center in just over two hours. (USACE photo by Michael Maddox)

Please conserve:
Think before you print.

Commander's Comments

Team Louisville,

Happy New [Fiscal] Year, and congratulations on another successful end-of-FY closeout! FY25 was marked by complex challenges—but through it all—this district remained determined, innovative and mission-focused…to DELIVER for our stakeholders.

In the final hours of Sept. 30, the team executed the last award for FY25, bringing our total obligations to over $1billion for another consecutive year. These accomplishments reflect not only your technical excellence, but also your steely resolve and commitment. Each military construction project that this district awards and then completes—whether a Child Development Center, a school, a barracks, a secure workspace, a hospital, a maintenance or an airfield facility—directly supports our nation's warfighters and veterans. Our civil works and operations projects increase the reliability of our navigation systems, reduce flood risks and improve recreational benefits for our fellow Americans. Simply put, our work is critical and our stakeholders are counting on us.

As a testament to the important work this district is undertaking, last month, we were honored to host Lt. Gen. William H. "Butch" Graham Jr., Commanding General of USACE and 56th Chief of Engineers, Command Sgt. Maj. Douglas Galick and Col. Daniel Herlihy, Great Lakes and Ohio River Division commander, as they toured critical projects in the district and recognized several of the district's heavy hitters.

Please enjoy the September/October issue of the Falls City Engineer, featuring highlights of our people and projects, including the completion of the new Fort Campbell Middle School, continued progress at the new Louisville VA Medical Center, a visit from the USACE Chief of Engineers and more!

Col. L. Reyn Mann
Commander and District Engineer
Louisville District
U.S. Army Corps of Engineers

Thank you for your continued dedication, professionalism, teamwork and perseverance. Our gritty workforce (you!) directly contribute to the Louisville District's "mission first" reputation throughout the enterprise. Here's to a great FY26 and another year of delivering solutions for our region and the nation. I'm proud to be on this team.

Building Strong…Together!
LOUISVILLE PROUD!

Col. L. Reyn Mann

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USACE, KDFWR stabilize shorelines, improve fish habitat at Rough River Lake

Abby Korfhage, public affairs

The U.S. Army Corps of Engineers Louisville District Rough River Lake project office recently partnered with Kentucky Department of Fish and Wildlife Resources to pilot the use of a hydroseeder to restore vegetation on eroding shorelines around the project. The innovative tool sprays mulch and native seeds with a pump and mixing tank—helping vegetation grow faster and stabilize eroding banks.

Adam Taylor, Rough River Lake park ranger, spearheaded the effort, which took place at the project in Falls of Rough, Kentucky, from Sept. 9-11.

"This is a great step toward protecting our lake's natural resources," said Taylor. "By enhancing the shoreline with vegetation, we not only help prevent erosion but also create a stronger foundation for a thriving aquatic ecosystem."

The team used boats and a large hose to distribute the hydroseeding mixture, which was custom blended for Rough River Lake, along the designated shorelines.

In addition to the hydroseeding, the team also placed evergreen trees, donated through the Christmas tree recycle program, and reef balls in the lake to create new underwater fish habitats, boosting the ecosystem both above and below the water's surface.

"We were not able to do the Christmas tree drop in the winter and spring like we normally do due to all the flooding we had," Taylor added. "However, we're excited to be able to give these trees a second life in the lake, where they will serve as habitats for the local fish population."

Kelsie Hall

Park Ranger Justin Gibson and KDFWR place reef balls filled with evergreen trees to help create new underwater fish habitats at Rough River Lake in Falls of Rough, Kentukcky, Sept. 10.

Evergreen trees are known to create ideal environments for attracting and supporting a wide range of fish species and other aquatic organisms. As these trees decompose, they release nutrients that promote the growth of plankton and invertebrates, which form the basis of the aquatic food chain. The donated trees are strategically anchored to environmental-friendly weights and submerged at various depths to provide essential places for fish to feed, shelter and spawn. They make great refuge and feeding habitat for game fish, as well as small fish and invertebrates that are crucial for a thriving ecosystem, according to KDFWR.

These efforts showcase the strong partnership between USACE and KDFWR, demonstrating their ongoing dedication to preserving and enhancing the health and resilience of Rough River Lake. By combining hydroseeding, tree placement and reef ball installations, they are working together to create more stable shorelines and stronger fisheries for the future.

"By working together with our partners, we're not only protecting the shoreline but also improving the lake's ecosystem," Taylor said. "We're excited to see the positive impact these actions will have on Rough River Lake, benefiting both wildlife and visitors for years to come."

Kelsie Hall

Rough River Lake Park Ranger Adam Taylor and KDFWR's Jeremy Shiflet use a hydro seeder to restore vegetation on eroding shorelines at Rough River Lake in Falls of Rough, Kentucky, Sept. 10.

Kelsie Hall

USACE and KDFWR's teams work together to stablilize shorelines at Rough River Lake, Sept. 10.

McAlpine Lock and Dam tests AI cameras to revolutionize data collection, improve operational efficiency

Abby Korfhage, public affairs

The U.S. Army Engineer Research and Development Center recently installed six new CorpsCam cameras at McAlpine Lock and Dam in Louisville, Kentucky, to explore the use of imagery in automating the Lock Performance Management System. Currently, LPMS relies on manual data entry by lock operators.

"It is research related to the feasibility of artificial intelligence cameras at Locks and Dams. It has the potential to be expanded to USACE Locks nationwide and McAlpine is the test site," said Jay Rickman, McAlpine Lock and Dam lockmaster.

According to a report, ERDC is leveraging automation to improve the safety and efficiency of operations across the USACE's lock network. The current manual data entry process often leads to record inconsistencies, such as typographical errors or incomplete information, while also diverting lock staff from other essential tasks.

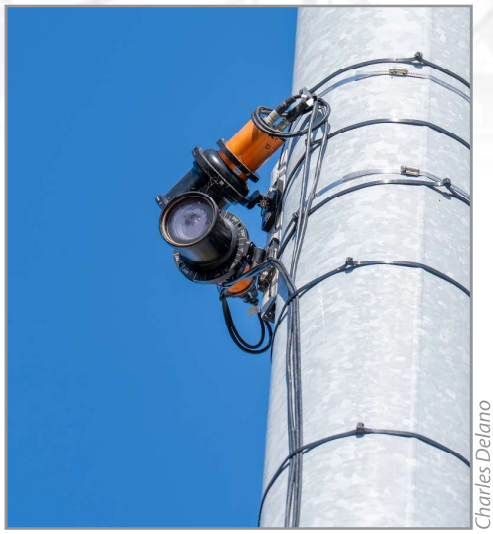
In mid-September, over the course of two days, the team set up cameras at various points around McAlpine Locks and Dam to evaluate their capability to capture key information, including vessel type, barge number, water levels, lockage times and vessel drafts. These new CorpsCam cameras will play a key role in advancing the development and testing of photogrammetry, AI, and machine learning tools for real-time operational applications.

This new research and development project's objective was to reduce the manual data entry that often slows down operations. The initiative was a collaboration between the LPMS program and the Coastal and Hydraulics Laboratory, aiming to streamline data collection and improve efficiency across the USACE network, according to the report.

In December 2024, a team of CHL researchers visited McAlpine Lock and Dam to calibrate a set of existing closed-circuit television cameras to use advanced algorithms and assess how well they could function in the complex environment of inland navigation. It was an exciting step forward for the team, as the potential to improve real-time data collection was significant.

"This is a big step forward," Rickman said. "We're on the brink of transforming how we gather and analyze critical data, making operations more efficient and reducing the workload on our staff."

In 2024, McAlpine Locks and Dam completed 4,530 commercial lockages, accommodating more than 29,000 loaded barges and over 16,000 empty ones. Last year, nearly 55 million tons of commercial goods passed through the locks, reinforcing its critical role in the region and nation's economy.



Charles Delano

One of six new CorpsCam cameras at McAlpine Lock and Dam in Louisville, Kentucky were installed to explore the use of imagery in automating the Lock Performance Management System.

USACE completes Fort Campbell Middle School for 2025-26 school year

Charles Delano

The $62.6 million, 167,000-square-foot USACE project will serve more than 700 students in grades five through seven, providing a safe, energy-efficient, and flexible 21st-century learning environment for military-connected children.

Charles Delano, public affairs

A brand-new chapter in education began this August as more than 700 students walked into the newly constructed Fort Campbell Middle School in Kentucky for the first time. The U.S. Army Corps of Engineers Louisville District delivered the 167,000-square-foot facility prior to the first day of the school year, giving students in grades five through seven a modern, flexible and inspiring environment in which to learn.

The $62.6 million project was awarded in 2020, just as the COVID-19 pandemic disrupted global supply chains. Delays in materials and equipment posed challenges for the construction timeline, but the district and contractor teams worked closely to mitigate impacts.

"Early on, the team had to adapt and proactive when sourcing materials," said Marshall Biter, USACE Louisville District Engineer/Administrative Contracting Officer. "Despite the complexity and general project hurdles, the facility was able to open in time for the 2025-26 school year to a very happy end user."

Built on the former Fort Campbell High School campus, the project combines new construction with renovations of select existing structures. Outdated facilities were demolished, while essential areas such as the gymnasium and cafeteria were preserved and updated. The result is a state-of-the-art 21st-century learning facility that includes neighborhood-style instructional studios, STEM labs, collaborative learning studios, occupational/physical therapy and Learning Impaired Moderate to Severe spaces, counseling and health service areas and technology-enabled administrative spaces.

"The design and construction of this facility truly represent what a 21st-century learning environment should be," said Stacey Purifoy-Jones, Section Chief, Military Branch - Army Support Section, Planning, Programs and Project Management Division. "From adaptable learning neighborhoods to integrated sustainability features, every detail was developed with students and teachers in mind."

Replacing Mahaffey Middle School, originally built in 1967, the new facility ensures military-connected children are learning in a safe, energy-efficient and future-ready environment.

"We know that true learning is collaborative. Like an interconnected framework, every beam supports the whole – students, teachers, family and community," said Dr. Beth Schiavino-Narvaez, Department of Defense Education Activity director. "We are better together, and this building was purpose built to make that collaboration thrive."

Outdoor amenities, including an artificial turf soccer field, baseball and softball fields and an amphitheater, provide new opportunities for student activities and community events.

A ribbon-cutting ceremony, to recognize the accomplishment was held Sept. 12, bringing together students, faculty, garrison leaders, DoDEA representatives, and USACE officials to mark the school's official dedication. The event showcased the collaboration between the installation, contractors and USACE Louisville District in delivering a facility designed to serve military families for decades to come.

Charles Delano

USACE Louisville District, Fort Campbell Middle School staff, Fort Campbell leaders, DoDEA members, contractors and community members cut a ceremonial ribbon to officially dedicate the brand-new Fort Campbell Middle School. Sep. 12, 2025, in Fort Campbell, Kentucky.

USACE project ensures Fort Campbell readiness

Charles Delano public affairs

The U.S. Army Corps of Engineers Louisville District is completing construction of a new microgrid at Fort Campbell, strengthening the installation's ability to operate independently in the event of a commercial power outage.

The project is part of the Army's initiative to install backup microgrids across its installations, ensuring mission-critical facilities remain operational during emergencies. For Fort Campbell, a hub for Army readiness and power projection, the system provides more than just reliable energy—it enhances the installation's ability to conduct full-spectrum operations without interruption.

"Fort Campbell is a very valuable and critical installation," said Jack Oakley, USACE Louisville District project manager. "Having their own microgrid will allow critical facilities to remain operational in case of an outage or emergency."

The Fort Campbell microgrid checks off the three priorities of the Army – people, readiness and modernization. If commercial power is lost, Soldiers and civilians can continue critical missions without relying on dozens of backup generators and fuel deliveries. This ensures that Fort Campbell maintains a lethal, mission-ready posture regardless of outside disruptions.

Charles Delano

A 12 megawatt natural gas powered microgrid at Fort Campbell, Kentucky, ensures the garrison sustains essential functions when the commercial power grid goes down. The microgrid is scheduled to be turned over to Fort Campbell, December 2025.

"The biggest challenge has been the coordination and interconnection piece," Oakley added. "My job was to make sure communication between all entities continued throughout the construction phase. Without getting everyone in the room together, we would not have been as efficient in coordinating our efforts."

Charles Delano

Officials shovel dirt at a goundbreaking ceremony for the project October 3, 2023, in Fort Campbell, Kentucky. The microgrid project, which incorporates three two-megawatt natural gas generators, will provide the capability for Fort Campbell to meet 100 percent mission capacity for up to two weeks in the event the traditional power grid is affected by weather, cyber or physical threat.

Rachael Haunz, branch chief, Support for Others, Planning, Programs, and Project Management Division, USACE Louisville District, emphasized the importance of partnerships in delivering this capability.

"The Fort Campbell microgrid project is key to the installation achieving resilience by allowing operations of critical missions when faced with adverse situations," Haunz said. "A strong partnership between the installation, utility provider, USACE and contractors was key in overcoming challenges and paves the way for future microgrid projects."

In simple terms, a microgrid is a self-sufficient energy system that can disconnect—or "island"—from the main power grid to operate independently. This allows installations to sustain essential functions when the commercial grid goes down. A planned "black start" will test the Fort Campbell system to ensure it operates as intended under real-world conditions.

By providing reliable backup power, the Fort Campbell microgrid directly supports Army readiness. It ensures Soldiers can focus on their mission without the distraction of energy insecurity, enhancing the installation's role in the nation's defense. The microgrid is scheduled to be turned over to the garrison, December 2025.

Joint occupancy team prepares for key transition from construction to care at New Louisville VA Medical Center

Michael Maddox, public affairs

Construction of the new Louisville VA Medical Center is now more than 80 percent complete. Much of that construction included standing up the buildings and facilities across the 34-acre property, but lots of detail work remains to get the project over the finish line.

Ensuring all that detail work is completed successfully takes input and supervision from all stakeholders in the project. The joint occupancy process allows for just that.

Joint occupancy refers to a coordinated phase—or period of transition—from construction of the facility to activation (operational outfitting/use) where multiple agencies share responsibilities and access to specific spaces. In the case of the new medical center, each agency represents various aspects of the project.

The U.S. Army Corps of Engineers provides project management, quality assurance and engineering support. The Robley Rex VAMC leadership provides operational oversight and ensures alignment with VA healthcare delivery priorities. The VA Office of Construction & Facilities Management is a federal oversight body guiding compliance, funding and project governance. Walsh-Turner Joint Venture is the prime contractor responsible for construction execution and site coordination. The Architect/Engineer team offers technical expertise, design intent clarification and support for field adjustments.

Ben Bruder, project manager for USACE, said the work the joint occupancy team is tackling can be broken down into multiple goals.

Defined Roles & Responsibilities: A joint occupancy Memorandum of Understanding will be drafted outlining who does what, when, and how. These documents help avoid conflicts and ensure smooth coordination during the joint occupancy phase.

Shared Site/Space Access: During joint occupancy, both the contractor and Robley Rex VA Medical Center staff have access to specific spaces and rooms. The contractor has completed the space to the degree that it is ready for VAMC vendors to deliver/install information technology, medical equipment, and canteen equipment while final construction activities and punch-list items are simultaneously being completed.

Collaborative Handover: This is a critical bridge between construction completion and full operational readiness as USACE ensures the facility meets contract requirements, the contractor completes the project on time and within budget and VA begins commissioning and activation processes.

Risk Mitigation: By overlapping occupancy, VA can identify operational issues early, and USACE and the contractor can address them before final turnover—reducing delays and improving facility readiness.

Representatives from each stakeholder organization meet monthly to ensure transparency, discuss issue resolution and share progress tracking.

Bruder said while the core intent of joint occupancy is expected to remain consistent, its scope may naturally expand to accommodate emerging operational needs and secondary contracts.

"This evolution could include enhanced support functions like coordination with Robley Rex VAMC security teams to ensure seamless access control and safety protocols or integration with medical equipment vendors, facilitating timely delivery, installation and maintenance of critical assets."

Success of the joint occupancy process will rely heavily on communication, said Bruder.

"Establishing open, consistent and transparent dialogue across all stakeholders to ensure alignment and timely issue resolution is important. It will allow us to foster a unified, dynamic team where agencies work together toward shared goals, leveraging each other's expertise," he said. "We are also integrating joint occupancy milestones into the master schedule to maintain momentum and avoid delays while synchronizing efforts across disciplines—design, construction, equipment, IT and operations—to ensure readiness at occupancy."

The Louisville VA Medical Center is a $940 million project that includes the construction of a new 910,115 square-foot medical center, parking structures, a 42,205 square-foot central utility plant, roadways, sidewalks and other site improvements.

The new 104-bed, full-service hospital will provide world-class healthcare for more than 45,000 Veterans in Kentucky and Southern Indiana by integrating modern patient-centered care concepts to provide the best possible care for Veterans.

Construction is anticipated to be complete in 2026.

To learn more about the project visit: www.va.gov/louisville-health-care/programs/new-robley-rex-va-medical-center.

Michael Maddox

Construction of the new Louisville VA Medical Center in Louisville, Kentucky, is now more than 80 percent complete. Much of that construction included standing up the buildings and facilities across the 34-acre property, but lots of detail work remains to get the project over the finish line.

USACE Chief of Engineers, senior leaders visit Louisville District

Katie Newton, public affairs

U.S. Army Corps of Engineers leaders—including Lt. Gen. William H. "Butch" Graham Jr., Commanding General of USACE and 56th Chief of Engineers, and Command Sgt. Maj. Douglas Galick—visited the Louisville District, touring critical projects and recognizing the dedication of district team members.

On Sept. 25, Louisville District leadership guided Lt. Gen. Graham and Col. Daniel Herlihy, Great Lakes and Ohio River Division commander, through several of the district's key projects.

First, they toured the $940 million Louisville VA Medical Center, a state-of-the-art healthcare facility being built to serve nearly 45,000 veterans in Kentucky and Southern Indiana. Graham was able to see firsthand the progress of the medical center, which is designed to deliver world-class care to those who have served the nation.

The visit continued with a stop at Rough River Lake in Falls of Rough, Kentucky, to discuss the Rough River Dam Safety Modification Project. This critical project will lower the dam's risk, ensuring it can continue to provide flood risk reduction benefits and enhance safety for surrounding communities for years to come.

Throughout the visits, several district employees were recognized for their hard work, including Terry Durham, Tara O'Leary, Adam Connelly, Jon Fillingham, and Robert Wheeler.

Earlier in the week, the district also hosted a visit from USACE Command Sgt. Maj. Douglas Galick, who toured Olmsted Locks and Dam in Olmsted, Illinois, and Smithland Locks and Dam in Brookport, Illinois. He also took the opportunity to present USACE Coins to Louisville District team members including, Wilhemina Cunningham and Thomas Adams at Olmsted Locks and Dam and Charlie Barnes and Kelly Winders at Smithland Locks and Dam.

"It's important to come here and get a chance to shake your hand and say thank you for what you do every day," said Galick, emphasizing the significance of recognizing the hard work and dedication of USACE employees across the country.

"We were elated to host our Chief and the Command Sergeant Major during their recent visits to the mighty Louisville District," said Col. L. Reyn Mann, Louisville District commander. "Any chance we get to glean insights from our senior leaders' perspectives is invaluable. Whether at one of our critical locks and dams, at one of the installations we support, or in delivering megaprojects for the VA—we appreciated the opportunity to showcase how this district continues to deliver today, innovate for tomorrow and focus on our world-class workforce."

These visits highlight USACE's continued dedication to supporting vital infrastructure projects that serve the nation, while also honoring the hard work of the team members who consistently deliver the mission safely.

Katie Newton

Lt. Gen. William H. "Butch" Graham Jr., Commanding General of USACE and 56th Chief of Engineers visits Rough River Lake in Falls of Rough, Kentucky, Sept. 25, 2025.

Michael Maddox

Lt. Gen. William H. "Butch" Graham Jr., Commanding General of USACE and 56th Chief of Engineers, tours the Louisville VA Medical Center in Louisville, Kentucky, Sept. 25, 2025.

Kelsie Hall

USACE Command Sgt. Maj. Douglas Galick toured Olmsted Locks and Dam in Olmsted, Illinois, and Smithland Locks and Dam in Brookport, Illinois, September 23-24, 2025.

Winter preparation key to hive success at Patoka Lake

Michael Maddox, public affairs

As the cooler weather of fall begins to chill the air, many creatures take time to prepare for wintertime – including honeybees. Because they do not hibernate, they must take steps to survive until the next spring. Beekeepers can help ensure a hive is successful by lending a helping hand as the little pollinators prepare for the winter.

Jim Merkley, U.S. Army Corps of Engineers, Louisville District park ranger and beekeeper at Patoka Lake, is providing that lending hand for the two hives onsite. He said evaluating the current health of the hives is the first step to fall maintenance.

"Fall maintenance is varied year to year depending on how the bees performed through the summer. It begins with an initial inspection that includes checking on the health of the queen, as well as the amount and condition of brood," he said. "We also check on the number of bees and the amount of honey that was produced during the past spring and summer. We do this to help prepare the bees for the winter."

Merkley said the inspection of the hives suggested that several actions be taken to encourage the best outcome for the honeybees.

"This year, fall inspection indicated that we should harvest a little honey and move excess bees along with stored honey from the larger hive to the smaller one. Also, one of our hives was overpopulated while the other hive was struggling with low numbers," he explained. "This resulted in a recent 'robbing' event that occurred when the larger hive invaded the smaller hive and removed all their stored honey."

Michael Maddox

Jim Merkley, park ranger and beekeeper at Patoka Lake, pulls out a frame of bees along with some capped honey from a hive as part of the annual fall inspectionin Dubois, Indiana, Sept. 3, 2025.

Before the bees were divided the larger hive had grown to about 80,000 bees and the smaller one had about 15,000. After maintenance each now have 30,000-50,000.

"Reducing the population of the larger hive at this time of the year also lessens the chance of a fall swarm. On the other hand, increasing the size of the smaller hive boosts honey reserves helping to give them strength during the upcoming winter," he added.

Now is a perfect time to make such adjustments as the bees are currently still gathering nectar and pollen from late season flowers to ensure they have enough honey stored for winter.

"Since we split the hives, the bees now have a chance to adjust and adapt to the new configuration while the weather is still nice and before the cold weather hits," Merkley said.

Merkley also performs a late fall checkup and winter prep in late October or early November once the hives have had time to adapt to the current adjustments.

"This will consist of a general check of hive condition, as well as mite treatment. The late fall check will also be the time when I add foam wrappers and inner cover insulation for heat retention. We also partially block the entrance area with an entrance reducer. This will also help keep heat in during the colder months by reducing the amount of airflow through the hive. Reducing the size of the entrance also helps the bees defend themselves, since fewer bees are flying due to outside conditions, they won't need as large of an opening."

Honeybees are a small part of the larger pollinator environment; pollinators are responsible for pollinating fruits, vegetables, and other crops that Americans consume every day. This, in turn, helps the American consumer as well as the United States economy. In addition, the Patoka Lake bees are used to help educate the public on the importance of pollinator health to the nation.

Michael Maddox

Jim Merkley (left), park ranger and beekeeper at Patoka Lake, and Tim Carter, a volunteer park attendant, inspect the smaller of the two hives at the lake for healthiness Sept. 3, 2025 in Dubois, Indiana.