

Corps helps Fort Knox prepare for change

by John Neville



Two Louisville District U.S. Army Corps of Engineers employees walk out of the New Fort Knox High School during construction. The school was completed in May. Photos by John Neville
A contractor cuts metal at the site of the new Fort Knox High School.

Fort Knox, Ky., is growing, and the Army Corps of Engineers is ensuring an orderly process. The Corps' Louisville District is managing three main projects on the post — the Human Resources Center of Excellence; facilities for the incoming 3rd Brigade Combat Team, 1st Infantry Division; and the new Fort Knox High School.

Two huge chevrons

Construction of the Human Resources Center of Excellence began in earnest in March 2008. The structure will house more than 4,000 employees within 880,000 square feet of office space. The center is scheduled for completion in June 2010.

The center's positioning at Knox was mandated by the 2005 Base Realignment and Closure report. It will consolidate the Human Resources Command — currently in facilities in Alexandria, Va., St. Louis and Indianapolis — with the Army Accessions Command.

The center comprises two chevron-shaped buildings, which appear like a corporal's rank from an aerial view. Customer requirements demanded that certain facilities be close to one another to ensure efficiency.

"The different branches are designed in such a way that you have them close together," said project engineer Sarah Sinclair. "The chevron allows maximum area to be as close as possible."

The Corps' permanent presence at the site ensures that all the work completed by contractors meets the Corps' standards. From cutting and filling soil to making sure the final spool of wire is installed correctly, Corps representatives are there to ensure the nearly \$200 million center will be ready for its customers.

And, as always, the Corps is focused on safety. So far, 360,000 man-hours have been racked up without lost time due to injuries.

"We're very safety focused," said the Corps' supervisory construction representative, Scott Hearne. "Our contractor has a very aggressive safety program with significant incentives for their employees, and their management is completely behind it. They budgeted for safety, and they're incorporating it into the job.

"We have several quality-assurance representatives on site each day," Hearne said. "One of their primary focuses is safety enforcement. We have a lot of people watching each day, and they make sure deficiencies are corrected."

Construction of the center is also helping the economies outside the gate. Construction laborers who reside in the local area numbered 175 in May, and that number jumped to between 200 and 250 in June. About 72 percent of materials used for the site have been, or will be, purchased from area vendors. Hotel and restaurant businesses have also been positively affected.



Incoming!

The Corps is also overseeing the construction of several new facilities being built for the incoming 1st Division's 3rd Brigade Combat Team.

Two barracks complexes will house 1,442 single Soldiers who will begin arriving this summer following a deployment to Afghanistan. The first, a \$51 million project that will house 600 Soldiers, was completed last summer. The second, a \$63 million complex that will house 842 Soldiers, will be finished within the next few months.

A contractor cuts metal at the site of the new Fort Knox High School.

Each barracks unit houses two Soldiers, and each Soldier will have his or her separate room. The two will share a bathroom and kitchen area that will include an oven, range with microwave and a full-size refrigerator.

“You talk to some of the sergeants major who have been in here, and they usually say, ‘You’ve got to be kidding me.’ [The barracks] are pretty amazing to them,” said resident engineer Jason Root.

The structures will be heated and cooled with geothermal pumps. Other Knox buildings have been heating and cooling with geothermal pumps for several years, and the post’s energy costs have dropped sharply as a result.

While energy-efficient windows are nothing new, the glass is heavy duty.

“These barracks are force-protection compliant,” Root explained. “The windows are built into the structure so that if the building was hit, the windows won’t become deadly projectiles.”

And if there is a blast, Soldiers living on the first floor won’t need to worry about floors two, three and four crashing down onto floor one.

“The design is called progressive collapse, which means if the top three floors collapse, the first floor is strong enough to hold [up] the top three floors,” Root said.

Brigade combat team Soldiers won’t have far to go for a good meal. Both barracks complexes, as well as the brigade’s renovated headquarter building and new \$12.2 million annex, surround a recently completed \$13.5 million dining facility. The facility has the capacity to feed the entire brigade in two separate feedings, according to Root.

New school

The final major project the Corps is managing on Knox is the new \$16 million high school. The current school, constructed in 1958 and added to in 1961 and 1966, is scheduled for demolition in August.

Despite a tight schedule, the Corps finished the school prior to the final day of the 2009 school year — May 18. The Corps increased the number of contracting representatives and intensely managed the project to meet the deadline.



A contractor talks to his boss at the site of the Human Resources Center of Excellence.

Phased process

The Corps uses a three-phase system to ensure quality. During the first phase — the preparatory phase — the Corps reviews all submittals for designs, details, specifications and test reports. A physical check of material on site against approvals and customer requirements is also completed. This phase also includes the all-important safety analysis

“You’ve got to identify the hazards, and you have to decide how you’re going to mitigate against those hazards,” said site resident engineer Roger Riddick. “When you sit down for the preparatory, you’re going over the entire phase of that work, and you’re discussing it in detail before you start. And, as you start, we have the second part of that three-phase system — the initial phase — where, as you’re watching things go up, you’re making sure what you discussed in preparatory is actually happening.”

The final stage — the follow up — occurs daily. During this phase, Corps inspectors review completed work to ensure compliance.

“It precludes problems and helps identify issues,” Riddick said.

Part of history

Corps employees feel a sense of pride in being part of the post’s historic transformation.

“This is no small task to achieve in such a short construction duration,” said George J. Jageman Jr., chief, Construction Division, Louisville District. “The skills and abilities learned from this experience will serve our newer employees well for many years to come and allow all to speak with pride that they were very much part of this busy and exciting era on the post.”

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