

# 'Lean' and Mean

## *Helping Quest Diagnostics Embark on Its Quest*

Medical testing company Quest Diagnostics recognizes the value of working with companies that have a national presence and local expertise.

Quest Diagnostics provides diagnostic testing, information and services from nearly 200 laboratories and 2,000 patient service centers across the United States. Quest retained Burns & McDonnell to redesign lab facilities in St. Louis and then Atlanta to conform with the company's Lean transformation effort. As Quest would discover, Burns & McDonnell has local offices in other cities with Quest facilities that can bring the same services.

After the St. Louis project was complete, Burns & McDonnell was tapped to perform a similar task at Quest's facility in Atlanta.

Lean transformation is a quality improvement initiative with several major goals. Burns & McDonnell helped Quest achieve some of those goals by:

- Developing a layout of Quest's laboratory testing area based on ordering patterns and shared specimen type, as well as an open floor plan.
- Developing mobile operating work cells wherever possible, consolidating work process steps and load building to increase productivity and efficiency.
- Designing aisle access to work cells for maximum materials management efficiency and least amount of work disruption.

Two-day charrettes in St. Louis and Atlanta to devise concepts for the transformations involved about 25 employees from both companies in each location.

**“We gave them options for completing the transformation while keeping the facilities open.”**

“Quest Diagnostics deals with a high volume of medical samples, using conveyors and other types of automated equipment,” says Ken Francis, the Burns & McDonnell project manager who led the team. “They needed designs in Atlanta and St. Louis that involved less handling and less inventory, implemented so it would not impede current workflows.

“We presented options showing what the facilities would look like with different configurations and with implementation of more automated equipment,” Francis adds. “Then we gave them options for completing the transformation while keeping the facilities open.”

In Atlanta, mechanical engineer Drew Butler and architect Lee Cole spent two days doing a

walkthrough of the facility, making suggestions to preliminary plans drawn by Quest.

“In some instances, equipment and departments encroached on each other,” Butler says. “The architecture team worked with the Quest Diagnostics teams to resolve the relocation conflicts.” The team also noticed that utility work was run through a 6-inch concrete slab that separated the first and second floors. They recommended instead that it go through a series of existing sheetrock chases to make movement easier.

Additionally, Quest Diagnostics needed to upgrade its regional help desk call center in New Jersey. Enter the Burns & McDonnell New Jersey office.

The company's help desk facility in Teterboro, N.J., was relocating to a larger facility in Lyndhurst, N.J. Burns & McDonnell project manager Sloan Gutowski helped the company renovate a 5,000-square-foot space to accommodate the facility, including design of new HVAC, electrical and communication systems. The Burns & McDonnell New Jersey office completed architectural design and project management while the St. Louis office completed mechanical, electrical and plumbing design.

“The renovation makes their help desk facility more efficient, accommodating more help desk personnel per square foot of space,” Gutowski says.

*For more information, contact Ken Francis, (314) 821-9016.*