

# Memphis Business Journal

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## Population growth in Collierville requires \$27 million upgrade to wastewater plants

Memphis Business Journal - by [Michael Sheffield](#)

The town of Collierville has invested nearly \$27 million in two wastewater facilities to accomodate population growth.

Collierville's Shelton Road Wastewater Treatment Plant was built in the early '80s with a capacity of 8 million gallons of water per day when population levels were below 8,000 people. With a current population of more than 45,000, the treatment plant needed a capacity of 12 million gallons per day. Its upgrades, budgeted at just over \$7.4 million, were designed by **SSR Ellers**, Inc.

The city also needed to upgrade its 3 million gallon-per-day capacity Northwest Wastewater Treatment Plant. The project, designed by **Allen & Hoshall** and Missouri-based **Black & Veatch Corp.**, was budgeted at \$19.9 million for two phases. The Northwest project included a new aeration lagoon system and activated sludge plant. It also included two new clarifiers, which remove the waste from the water that flows through the plant, and a solids dewatering facility.

Ben Pearson, design engineer and project manager for Allen & Hoshall, says the original plant had reached its capacity. Bill Kilp, director of the Collierville's Public Services Administration, says the Northwest plant serves the side of the city that is seeing more development, while the Shelton Road plant handles the needs of the older part of town.

Brad Davis, an engineer with SSR Ellers, says the Shelton Road project not only required the design team to switch out equipment that had been in place since the 1980s, but also to find the original equipment, for which no real plans existed.

"We didn't know where everything was because it was put in before we got there," Kilp says.

Construction on the Shelton Road project began in December 2006, and was completed in July of this year. It included the addition of a new scum removal and treatment center and two new 94-foot, 20-foot deep clarifiers. The two original clarifiers at the plant now serve as back-ups on the 13-acre site.

Kilp says the project included rehabbing some of the century-old sewer mains in Collierville and developing a design that could easily be retrofitted as the town grows. Davis says the new facility should be able to handle the town's wastewater for the next 20 years.

The new plants can be controlled from anywhere with secured Web access, Davis says. With the Shelton Road project, the city had to manage the project while not violating any environmental standards.

"We had to figure out what we could make happen in the most cost effective way," Davis says. "We were able to do all of the work in-house, which helped the coordination part go a little bit smoother."



COURTESY COLLIERVILLE PUBLIC SERVICES DEPT.

Construction photo of Shelton Road Wastewater Treatment Facility clarifier

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With the new technology, Tim Overly, Collierville's public utilities director, says the system has improved its efficiency.

"The old system required everything to be done manually, but with this one, the equipment can talk to each other, and everything works well together," Overly says. "It's made our jobs a lot easier. It's one thing to design something, but it's another for it to actually function."

### **The Town of Collierville**

**Population:** 45,000

**Mayor:** Stan Joyner Jr.

**Web site:** [www.collierville.com](http://www.collierville.com)

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