## **Real-Life Solutions**

IRRIGATION SYSTEM UPGRADE

# Making the Most of the Money

New turfgrass cultivars forced Ridgeway CC to replace its 30-year old irrigation system, using a creative financing method to fund the job

BY FRANK H. ANDORKA JR., MANAGING EDITOR

ime finally ran out on the irrigation system at Ridgeway CC in Memphis, Tenn. After more than 30 years of valiant service, it couldn't pump enough water to meet the needs of the new zoysiagrass fairways and bentgrass greens that certified superintendent Al Davis installed.

"It was a great system when it was installed in 1971, and it served our needs well for a long time," Davis says. "But we were fixing 50 to 60 leaks per year, and it was expensive to fix them."

So Davis started looking for a new irrigation system. He replaced his hodge podge of different parts with a complete, one-brand system through careful planning in conjunction with an irrigation consultant. Then

Ridgeway got creative when it came to financing to make sure the project was completed.

## The problem

It all started when Davis decided to change the turf on his course. Wanting to improve the overall turfgrass quality of his course, he switched from bermudagrass greens and fairways to zoysiagrass fairways and bentgrass greens. He chose zoysiagrass because peers told him it was drought-tolerant, which after last year's weather conditions seemed like a godsend.

Trouble was, once he planted the turf, he discovered what he'd been told about zoysia wasn't necessarily true.

"I didn't find zoysiagrass to be more drought-tolerant," Davis says. "So between the bentgrass and the zoysia, we pushed the limits of our irrigation system more than in the past."

The old system watered between 55 acres and 60 acres of bermudagrass tees, greens and fairways and handled that adequately. But after the transition to turf that needed more water, it finally broke down. Leaks sprung up at the rate of five per month because of the increase volume of water being pumped through 30-year-old piping. When Davis wanted to fix a leak, he had to shut off the entire system. And the process of repairing leaks caused other related problems.

"Whenever you fix an irrigation leak, there's the disruption of digging up the pipes, and you run the risk of breaking pipes and cutting wires," Davis says. "We were doing some of that, so it had become a nightmare."

Finally, Davis says he had no central control over the older irrigation system. To change the cycles, he had to change the electromechanical clocks by hand at every station. "It was time-consuming and not cost-efficient," he says.

The club authorized the purchase in the spring 2002 after being warned that the system was inadequate to deal with another long, hot summer.

## The solution

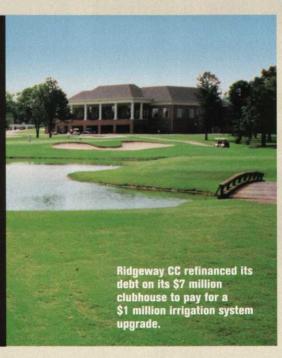
Davis' first move was to hire an irrigation consultant as he started planning for his new system.

"It was his job to sell the board members on the need for a new system and the advantages it would bring," Davis says. "If I tell them they need a new system, they may not listen. But if a consultant tells them the same thing, they're attentive and are more likely to authorize the purchase."

Hi second decision was to create a

A 32-year old irrigation system couldn't handle the increased capacity after Ridgeway CC changed from bermudagrass greens and fairways to bentgrass greens and zoysiagrass fairways.

A new \$1 million system allowed the superintendent to increase the amount of irrigated turf from about 60 acres to 150 acres. What allowed the project to move forward in a down economy was the refinancing of debt already spent for a clubhouse renovation.



global positioning system (GPS) map for his course. (The GPS is a web of 24 government-run satellites in 12-hour orbits and employs the triangulation method to determine position.) The goal was to use the map to determine how much pipe a new system would use. Davis says it helped him more accurately forecast the amount of pipe he would have to buy.

"I didn't have a good irrigation map, and the GPS map was the best investment I could have made," Davis says. "It was so accurate that we predicted within a few sticks of pipe how much we needed."

Davis says he was so impressed with how long his previous hybrid system performed, he initially wanted to follow the same formula this time around. When Davis went to his consultant with the idea, however, he laughed. "He told me he couldn't do that because we'd never get any warrantees with a mix of systems," Davis says.

Davis asked his peers to recommend a single system to install. He eventually chose Hunter Industries.

The most attractive piece of his new irrigation system is that the central-control computer program is being customized for his golf course, Davis says. Hunter sent its computer programmers out to discuss exactly what features he needed so they could include them in the package. (In late June, the program was still being written, and Davis was operating on a temporary system.)

"I'm not good with computers,"
Davis says. "I've never had a computer
before, let alone computerized control
for my irrigation system. But I'm learning how to do it now, and I like the
flexibility."

He was also impressed that the new system will run automatically even if his computer goes down. Each satellite is programmed to run on the last schedule it received even if there's no communication from the central computer. "Once they train me and I get

the Internet at my shop, I'll even be able to run it over the Web," he adds.

There was still the problem, however, of how to pay for the \$1 million system. The economy is still in the doldrums in many parts of the country (including Tennessee), so it took some creative thinking at the course to find the funding. Fortunately, a previous \$7 million clubhouse renovation came to the rescue.

"The club was able to go back to the bank and say it needed an extra \$1 million for the new system," Davis says. "That ended up being no problem."

## RENOVATION HIGHLIGHT



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### A Look Back in Time

In 2001, Philadelphia Country Club underwent a major transformation of its storied course. During the renovations, which included much needed tree work and fumi-

gating the fairways, and greens, a number of old aerial photographs were found. The photographs were taken during the late 1920's and show much of the course in its original design.

The photos showed very large, dramatic bunker complexes which didn't reflect their present state. Course Superintendent, Mike McNulty was quite surprised.



"We knew the bunkers were grassed in several decades ago. But the old photos showed that our current bunkers were roughly two-thirds the size." McNulty said. He further determined that much of the grassing had occurred to minimize bunker maintenance costs.



McNulty had the opportunity to install Sandtrapper, TM an advanced polymer designed specifically for lining bunkers. "With so many of the newly redefined bunkers having dramatic shapes and flashing, we had to identify a solution." Along with new drainage systems, they installed Sandtrapper on the severe slopes to complete the bunker renovation on 9 of their 27 holes.

We followed up with Mike to see how well Sandtrapper worked on his new bunkers. "This product has worked exceptionally well. We've had several big storms recently that washed out most of bunkers without Sandtrapper." When asked how this product aided in his renovation, he replied, "We're going to install Sandtrapper on another 9 holes this year."

If you're planning some projects this year, make the bunkers a priority. Hundreds have already done it. To find out more about Sandtrapper, call IVI-GOLF toll-free at 888-970-5111 or visit www.sandtrapper.com.

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