Real-Life Solutions

Strengthening Command and Control

A 22-year old irrigation system at Riviera CC made it difficult to water the golf course efficiently. An upgraded control system put the superintendent back in charge

BY FRANK H. ANDORKA JR., MANAGING EDITOR



att Morton, superintendent at The Riviera CC in Pacific Palisades, Calif., is not a control freak, but he wanted to control his irrigation system.

Unfortunately, the 22-year-old system didn't have a central control system. It would take guts to start an upgrade of the irrigation control system ahead of the course's premier event in February 2002, but it had to be done. "We had fallen at least two generations behind with our controllers, and it was really difficult to irrigate the course in a timely fashion," Morton says. "We definitely needed to do something because the system was prehistoric."

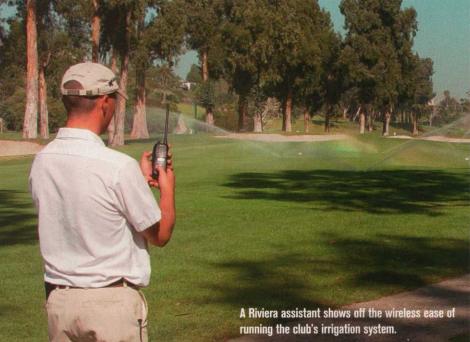
With so many possibilities for upgrades, however, Riviera's decision-makers didn't want to rush to make a choice. So they bided their time during the summer of

Problem

Without a central control system, Riviera's older irrigation system (circa 1979) didn't allow the superintendent to change the watering schedule easily. The 90 satellites didn't communicate, so each station had to be changed manually.

Solution

Installing a Signature control system gave superintendent Matt Morton the ability to change the entire program from any satellite or central mainframe. It shortened the water window and gave him more control over his system.



2001 and tested a variety of products. But they also had to be careful because it rarely rains from March through December in Southern California. "You have to be good at water management, and our old system didn't allow us to be as good as we wanted to be," Morton says.

The problem

The system that irrigated Riviera's historic fairways and greens was installed in 1979, at a time in irrigation technology when central control systems were few and far between. As a result, when Riviera's irrigation technicians wanted to update the irrigation program, they had to travel around to the course's 90 satellite stations (which control nearly 4,000 heads) and change them individually.

"There was no way to do it efficiently," says Morton, who was an assistant to then superintendent Paul Ramina at the time. "We'd send our irrigation technicians out to make changes, and it would take them a long time to get around the course. That was a waste of man hours we could have used on other projects if we'd just been able to update the system from a central location. We had to become more efficient."

In addition, while modern irrigation systems allow superintendents to control individual sprinkler heads to ensure consistent coverage, Riviera's system didn't. "It was kind of crazy," Morton says.

When word leaked out that Riviera was contemplating an irrigation upgrade, Ramina was besieged with irrigation companies who wanted to provide the hardware and software, Morton says. Each company provided test controllers for Ramina and Morton to try before they made a final decision. After months of looking at different systems, Ramina decided on one. Then he received a call from a Signature Controls representative. "They didn't have much exposure out here on the West Coast," Morton says.

Curt Schaubel, sales director for Signature Control Systems, says the company hadn't provided its systems to a top 100 course in the West, so the opportunity to help Riviera with its problems was too good to pass up.

"We felt our system could address all of

their concerns by allowing the superintendent to control any sprinkler head from any individual satellite on the course," Schaubel says.

The solution

After testing Signature's products for a few weeks, Ramina was

so impressed that he changed his mind and decided to go with its control system.

"We thought the central control system that Signature offered was terrific," Morton says. "It was an enormous improvement over what we had. We can have fun and get creative with the new controllers."

Morton says Ramina also liked the fact that the new satellite systems could be upgraded easily so the course didn't need to exchange hardware anymore. "New changes in software are downloaded in a matter of seconds, just like you would do at your home or office PC," Morton says.

The next challenge was deciding when to do the upgrade. As Ramina and Morton looked at the calendar, they realized the only logical time to make the change was in December 2001. In Southern California, golf courses get the most rain during that time, so it's the perfect time to make alter-*Continued on page 80*



The new Signature satellites (above) easily took the place of the older outdated system. Riviera's crew members ripped out the old system and rewired the new one once it was installed (below).

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ations to an irrigation system because the rain will take care of watering the turf while the system is out of commission, Morton says.

But there was another potential snag that had nothing to do with the weather: The course had only six weeks to complete the work and get out of the way before the Nissan Open rolled into town.

"There are some people who would say that it took a lot of courage to alter your irrigation system six weeks before a major tournament," Morton says. "But we couldn't afford to make the changes during the summer because you'd risk turf loss. We just had to make sure everything went as smoothly as possible."

Fortunately, the satellite replacement proved to be fairly easy, Morton says. It only took one week.

"Our staff ripped out the old sys-

tem, leaving only the concrete pedestals and wiring," Morton says. "The Signature team installed the new satellites, and we rewired them."

But weren't they worried that something might go wrong before the tournament?

"We had complete confidence in the system," Morton says. "Our biggest concern was that the learning curve for our irrigation technicians might be too steep. But it's an instinctual system, so it was easy to train them. We had a successful PGA event, and the controllers performed beautifully."

Outlook

What impresses Morton most about the system is the direction the Signature team members are heading. "They have taken a step toward the future in their design, and I respect the fact that they directly implement changes to the software from superintendents' negative and positive feedback," he says.

Morton says the course conditioning improved as he gained better control over the irrigation system. The golfers noticed, particularly in the heat of last summer.

"We had an extremely difficult summer — one of the driest years to date — and we came out above and beyond expectations," Morton says. "We received more compliments from the golfers than I can remember."

Morton is also happy that he won't have to worry about a major overhaul of the controllers when the club replaces its entire system from the ground up in two years.

"We're looking forward to 2005," Morton says. "With new piping and a flexible control system, we expect to have one of the best overall irrigation systems in the industry."

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