

CASE STUDY 1



Win-Win IRRIGATION

Tennessee's Indian Hills Golf Club was in need of more water, and its corporate neighbor was looking to rid itself of some.

It was an offer too good to resist.

Indian Hills Golf Club, an 18-hole, semi-private club located in Murfreesboro, Tenn., had always relied on two small wells to fill its irrigation reservoirs, and this supply typically dried up around the end of July or the first of August, says superintendent Brad Marcy.

"The well pumps don't pull out enough water to keep our reservoirs full," says Marcy, who operates with a \$400,000 annual maintenance budget and a staff of 14. "So we really didn't water much more than tees and greens because our water source was so weak and limited."

Across the way, Indian Hills' neighbor, a General Mills processing facility, needed a way to get rid of the wastewater it used to clean equipment instead of treating it and sending it into the city's sewer system — a process that incurred a substantial cost.

So two years ago representatives from the General Mills facility proposed footing the \$1

SMART IRRIGATION

By Michael Zawacki



million price tag to divert the wastewater from its facility to Indian Hills' irrigation reservoirs. The plan would transfer about 500,000 gallons per day for 236 days per year.

"We would no longer be dependent upon our well pumps for water," Marcy says.

For both parties it's an apparent win-win water scenario.

Marcy, though, had initial reservations about the quality of the plant's wastewater. Elevated mineral content or other contaminants potentially could have harmed the course's 419 bermudagrass fairways and its bentgrass greens. However, extensive water quality assurance tests haven't yet raised any major red flags with the course, he says.

"Right now I'm concerned about the lack of calcium in the water, which weighs down the sodium and pushes it through the soil profile," he says. "For right now we'll continue to strictly monitor it and conduct weekly testing to make sure the sodium level is where we want it. We'll improve the water's quality as we go when it's needed, and to do that we'll use a calcium product to reduce the sodium issues in the water."

As of mid-June, construction crews were breaking ground and laying the pipe to divert the wastewater from the General Mills facility to Indian Hills. The project is scheduled for completion early this month. GCI



Top left: A rock trencher gets ready to cut a trench that will hold the pipe that will bring as much as 500,000 gallons of water a day to Indian Hills Golf Club.

Top right: An inflatable device called "The Big Blue Bladder" dams part of the river to allow workers to lay the 12-inch pipe from one bank to the other.

Bottom left: The finished river crossing in mid-June. The \$1 million project is scheduled for completion early this month.