will feature bigger greens, some of which have been enlarged as much as 50 percent. In addition to being bigger, they'll be somewhat unique.

"USGA specs for a green call for a four-inch layer of gravel," said Tatum, "but we've eliminated the gravel to facilitate percolation of water down through the soil.

"The purpose of the gravel is to enable a green to hold water, but when you're in a geographic area that gets 100 inches of rain a year, holding water isn't exactly something you have to worry about. If you allow the water to be held you risk algae problems, especially in shady areas. Besides, with our sprinkler setup any of our greens can get all the water they need."

Tatum added that doing away with gavel and thus facilitating percolation of water also helps get rid of salt in a soil profile.

Also certain to be noticed on the revised Bobcat will be enlarged and leveled tees.

"The tees will be pointing down the fairways, too," said Tatum, adding that with the Bobcat course such wasn't always the case.

Although some fairways and greens are being recontoured, the changes implemented by Sarasota golf course designer Chip Powell and Clearwater contractor MGI, Inc. are subtle as opposed to dramatic. For example, golfers familiar with the Bobcat of the past will notice that on some greens putts that once curved right will instead curve left. Otherwise, the course will play pretty much as it always has.

But if it's drama you crave, consider that the levels of 10 fairways are being raised to improve drainage, an undertaking that required moving 42,000 cubic yards of fill. The fill was extracted from what will — when the project is completed — be seven acres of lakes, some of them new, some extensions of existing lakes.

One of the most dramatic features of the project overall is raising the level of No. 2 fairway by two feet.

"That fairway's always been a problem," said Tatum. "During the rainy season it often was under water, or if not under water then too soggy for a golf cart to drive over. It was a pain to mow, too."

He said that when all the new drainage

is in place and all grading is completed, the fairways and tees would be planted in GN-1, so-called Norman grass. The greens will be planted in Floradwarf.

"We've given the Floradwarf a thorough test and like the way it performs," said Tatum. "It's resilient, has a high density, and can be mowed to a lower height, as low as 1/10th-of-an-inch. In fact, mowed to that height it has greater density than Tifdwarf mowed to 1/4-inch. They claim it has density comparable to bentgrass, and in every test we've conducted here at The Forest, the claim seems to be right on the money."

Tatum is more than enthusiastic about the potential of the new ultradwarf grasses, and says it's only a matter of time until all South Florida greens are planted in one of the new varieties.

"They grow in faster and they mature faster," he said. "In fact, they could be the best thing that has happened to courses down here in 30 years." Southwest Florida being where and what it is, Tatum's admittedly overriding concern throughout has been the weather; considering the extent of the work being done, the region's rainy season isn't exactly conducive to the rebuilding of an entire golf course.

"Our target date to open is November 1," said Tatum. "Right now we're about halfway. But if we get a few breaks from the weather, we should be right on schedule."

Rebuilding projects done in-house

BY JOE ONDO, CGCS Winter Pines Golf Club

Greens

The decision to rebuild our worst greens was based on several factors:

(1) Some of the greens with Tifgreen 328 surfaces were acceptable when

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- (2) Our play in the summer months was increasing and we wanted to give our players better greens all year round.
- (3) The drainage was poor due to the underlying muck soil and low spots developed as the muck settled.
- (4) We could not keep consistent ball roll between the Tifgreen 328 and Tifdwarf greens.

We felt that we had nine greens that needed to be improved. Six had "328" surfaces and three were already Tifdwarf, but needed help.

Since we are a public golf course, we decided we would only do one green a year to minimize the impact to our players. We have completed eight greens so far with only one of the "328" greens to go.

After deciding which green we would do first, a temporary green was cut-in and trained on a high and dry spot in the fairway. We made it about 2,500 square feet because we figured we would be using it about three months. The players didn't seem to mind playing one temporary green when they saw the changes we were making to improve the hole.

The only additional equipment we needed for the project was a trencher for the drain lines. We did rent a small dump truck to use on a couple of greens, but our bridges wouldn't handle the weight so we did the bulk of our hauling of greens mix and gravel with our two trucksters, a Jacobsen T-2000 and a EZ-Go GXT 1500 with dump beds. They could haul about 1/3 of a yard at a time. We were able to place some of the materials on nearby empty lots, but it still was a lot of hauling.

The old putting surface sod was cut, stripped and hauled away. Then we trenched in a herringbone pattern drain field with a "smile" drain along the front edge of the putting surface. On the muck-based greens we used choker sand to help drainage and stabilize low areas in the profile. Most greens were already too low so none were cored out. Rather, we built them up and added fill to tie into the slope contour and sodded the banks.

Some of the greens were kept about the same size, but if we felt it too small, we

added mix to make more pin locations. The shaping was done by myself and the crew with a tractor and box blade attachment. Then we went over it with a sand pro till we were satisfied with the look.

Sprinklers were moved if necessary and the soil was watered and packed. Fumigation was done by an outside contractor and the plastic tarp removed a few days later. Then each green was sprigged with Tifdwarf at the rate of 30 bushels per thousand square feet. We grew them in for at least eight weeks unless weather or timing pushed back our opening date.

The problem with doing one green a year was there was no guarantee we would get the same Tifdwarf the next year, but it was an improvement over what we had. Some mutation and contamination has occurred and we have tried to plug some of it out and stay ahead of it as best we can

For the most part, the crew enjoyed the challenge of the project while still maintaining the golf course for play. Some of the flymow and edging work got put on hold for a little longer than we would have liked, but overall the golf course was kept maintained pretty well.

Tees

The rebuilding of our tee tops has been another continuing project. Some of the tees built in 1968 had become "crowned" from top dressing over the years. They were also too small to handle the wear from our steadily increasing play.

The areas around the tees to be improved were shot with a transit to see how large we could make them. The sod was stripped and stacked nearby to be replaced after we finished the alterations. We used the tractor with box blade to level, widen and extend each tee as needed. We packed the soil and shot it again with the transit to make sure it was level. Then we replaced the sod, rolled it, top dressed it and opened it for play.

Drainage

During the wet summer we had two or three years ago, some of other pushed-up greens that had no drainage began to have problems. We decided to solve the problem by installing a drain field without rebuilding the entire green. Again, we cut a temporary green but this time only for a day. We cut a herringbone pattern on the green with a sod cutter and saved the sod. Then we brought in plywood to lay along the sod cuts for the rented trencher to ride on.

The plywood made cleaning up the dirt easier and protected the green from being rutted. The pipe and gravel were installed in the trenches and the top of the drain field was kept at least 8 inches below the surface so they wouldn't interfere with future cup setting. An air vent was installed in the drainpipe where it extended into the collar to aid in better drainage flow. Greensmix was used to fill top 8 inches of the trenches and watered and packed. The sod was laid back down as it had come out and then packed.

The green was back open as soon as we were done that day. Some settling did occur, and those areas were hand topdressed as needed. We have done five greens this way so far.

Whether rebuilding greens, tees or adding drainage, everything we do helps make Winter Pines a little better golf course for everyone to play and enjoy.

Pine Tree Golf Club The Restoration of a Dick Wilson Classic

In 1961 Dick Wilson created a great masterpiece, the Pine Tree Golf Club, in Boynton Beach. The course quickly gained a national reputation by being honored in the Top Ten of Golf Digest's top 100 courses in the country. The course, virtually untouched since 1961, has consistently held that honor.

This summer, architect Ron Forse, who recently successfully restored Indian Creek in Miami, will bring back Wilson's design at Pine Tree. Working from photos commissioned by Ben Hogan, greens that have risen two feet from 36 years of top dressing will be lowered and enlarged to the original specifications.

The goal is to have a rebirth of the superb layout crafted by Wilson in 1961.