#### **EDUCATION**

### Golfers won't buy into courses they can't play

(Continued from page 34)

us what kind of roof tile they preferred, they also told us that they wanted to look out on a green golf course and blue water.

"The vistas they had in mind and the regulatory agencies' ideas of what was beautiful seldom coincided. When 25 percent of your course is scrubland and nobody wants to look at it from the golf course or from his home, it's some trick to hide it."

Downing said the focus groups also helped the developer pin down exactly how much his clients were willing to spend on dues which, in turn, told him what the operating budget of the golf course would be for the next six years.

"Finding an architect who was sensitive to environmental limits and who was willing to design a course with the vistas we felt our buyers would demand at a degree of difficulty we thought they could handle and which could be maintained for six years at \$550,000 to \$750,000 a year was not easy," he said.

The group finally settled on Arthur Hills, who had designed the much acclaimed Bonita Bay project in Naples. "Pete (Dye) refers to him as the King of Naples.

"And Art had to agree to tone down the contours on his greens — which is sort of his signature — and do some other things to make the course playable for our average prospect: an 18-handicapper who hits a 180-yard slice."



Alice Dye helps hold husband Pete's hand-drawn illustration of the sump pockets he uses to drain lowlying fairways.

## The water doesn't know Pete's basins can't work, so it goes ahead and drains

Golf course architect Pete Dye has invented the hydrological equivalent to the bumblebee.

The bumblebee, as all aeronautical engineers know, is aerodynamically unstable and cannot possibly fly. Fortunately, the bumblebee is not an engineer and doesn't know it cannot fly so it goes ahead and does it anyway.

Much the same can be said about the "catch pockets" or "sump basins" Dye uses to drain low-lying courses in south Florida without elevating the fairways. "I never could get an engineer to agree that it should work," Dye said. "But it does. I guarantee you that Old Marsh (a Dye-designed course in North Palm Beach), where the fairways are only a foot above the water table, the course will be open after a 2- or 3-inch rain that closes down the rest of South Florida."

Old Marsh is built on marshland so sensitive that "we would not have got the permits unless I could guarantee that every drop of water — rainfall or irrigation — (Please see ALTERNATIVE, page 38)



# Alternative was a four-mile gravity flow through culvert

(Continued from page 36)

that fell anywhere on the golf course tees, greens, fairways, cart paths, parking lots or wherever — would be kept out of the natural marshes, he said.

Faced with the alternative of trying to make water flow four miles by gravity through 48-inch culvert, Dye devised a series of five concrete-lined basins, or "catch pockets," into which water is carried from underneath the fairways by drain tiles at a grade of one percent or greater.

Because the basins are lined, water can get into them only through the drain tiles and therefore, said Dye, "since I learned at an early age that water seeks its own level, the water under the fairways can only go down. By drawing water out of the basins with 500 gallon-per-minute sump pumps, Dye says the water level under the fairways can be kept "two or three feet lower than the water table."

Dye, a 30-year member of the GCSAA and immediate past president of the American Society of Golf Course Architects, is a graduate of Stetson University in Deland and Rollins College in Winter Park. Among the more prominent courses he has designed since he began his career in 1960 are Harbour Town Links on Hilton Head Island, the TPC at Sawgrass, PGA West and Old Marsh.

His appearance was doubly appropriate since he is a member of both the USGA Green Section and Regional Affairs committees.

## Women need choice of tees, says architect Alice Dye

Give women the same opportunity as men, said Alice Dye — the chance to choose a set of tees suited to their games. "Women have become an economic



factor in modern golf," said Dye, a golf course architect, two-time USGA senior women's amateur champion and a member of the USGA women's handicap procedure committee.

"Women hit balls, take lessons, buy clothes — and they go the whole way: outfits, shoes, socks, hats, visors — take carts, eat lunch and, since they've been out playing golf all day and they're too tired to cook, they bring the whole family to the club to eat dinner.

"And if you want to maximize this economic factor, you've got to make golf courses more enjoyable for women."

The average woman hits the ball about 75 percent as far as the average man, she noted, and the average men's course from the white tees is 6400 yards. Seventy-five percent of 6400 is 4800 yards.

"The average ladies' course in this country is 5800 yards," she said.

"Ladies definitely need a second set of tees with shorter yardage — about 5000 yards.

"On a good day, if everything goes right, the average lady hits the ball about 130 yards. If she gets two 'career' shots backto-back, that means she's gone 260 yards and still has a third shot from the fairway on nearly every par four.

"It's tough to make birdie putts from the middle of the fairway."

The ideal length for par-four holes for women is 240-340 yards for average players and 300-380 yards for the best, she said. Par threes should range from 60 to 150 yards.

"There isn't much you can do with par fives," she said. "The legal minimum is 401 yards and, with three of her best shots, the average lady is going to get 370-390.

"But at least you can give her a fighting chance on the par fours."

But give her that fighting chance on a set of tees with official USGA ratings, she said.

"The biggest disservice you can do to a lady is move the tees up from where the course is rated. They may score a little better but they haven't become better players. But if you move the tees up for a ladies' tournament, their handicaps are going to

(Please see MOST WOMEN, page 41)