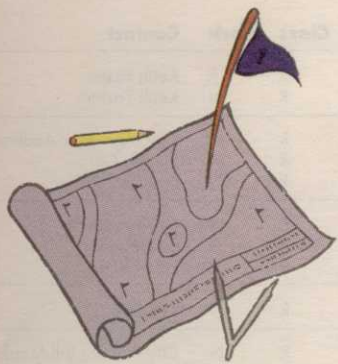


BRIEFS



NICKLAUS CUTS STAFF

Jack Nicklaus' Golden Bear International, reportedly with one-third fewer golf course projects than a year ago, has cut its staff from 72 to 43.

Golden Bear General Manager of Golf Services Mark Hessman said the reduction has been gradual over the last 18 months, reflecting a slowdown in the golf development marketplace worldwide.

Hessman said the firm has 22 golf projects compared to 35 a year ago, and it has closed its London office and is changing the role of its Asian headquarters to a sales office.

Nicklaus intends to halve his design fee from a reported \$1.25 million to \$1.5 million. That price will secure Nicklaus and son Jackie's services.

FLICKWIR JOINS LINKSCORP

NORTHFIELD, Ill. — LinksCorp, a national golf course acquisition firm and management company, has named David Flickwir executive vice president and chief financial officer.

Flickwir, 41, joins LinksCorp from American Golf Corp. in Santa Monica, Calif., where he had worked for 13 years, most recently as vice president of acquisitions. He also was responsible for developing leads, financial analysis and negotiating contracts for public, private and resort golf courses.

BURNS' OHIO COURSE SEEDED

WOOSTER, Ohio — Grow-in of Hawks Nest Golf Club is well under way with seeding being done place in September and opening scheduled for early next summer. The course is owned by Betty and Earl Hawkins, owners of the local Hawkins Cafeteria and the Hawkins Market supermarket chain. The project will be an upscale daily fee course.

The course is being designed by Burns Golf Design from Fernandina Beach, Fla. and constructed by Central Florida Turf from Avon Park.

HECKENKEMPER REDESIGNING 3 MUNIS

Randy Heckenkemper's Planning Design Group of Tulsa, Okla., is remodeling three of Oklahoma City's municipal courses — Lake Hefner, Earlywine and Tröspen Park golf courses.

Lake Hefner will be open to the public in October. An additional 18 holes will be constructed at Earlywine. The remodeling of each of these golf courses will provide maximum use of the existing facilities.

Additional golf courses designed by Heckenkemper are Forest Ridge Golf Club and Southern Hills Golf Club, both located in Tulsa.

GOLF COURSE NEWS

Landfill course catches world's attention

By MARK LESLIE

Today, St. Lucie County, Fla. — tomorrow, the world. That is the hope of government officials, environmentalists, and an international engineering firm involved in Fairwinds Golf Course.

The Fairwinds story is one of turning a long-term financial drain into a long-range asset for St. Lucie County.

Today, on the site where pollutants in a closed landfill were contaminating ground water, a system designed by Hazen and Sawyer of Ft. Pierce, Fla., reclaims con-

taminated water beneath the landfill, treats it and re-uses it to irrigate the course.

Ron Sigmon, project director and special permitting agent for the county, said: "So far as we know, we're the first ones to try to do this."

Course architect Jim Fazio thinks the public could anticipate similar projects in the future, saying there are a number of trench-and-fill landfills in Florida similar to St. Lucie County's.

Sigmon said: "I would think this is a thing of the future. The reason is, golfers seem to be willing to pay their fair share

for recreational activities. As opposed to a park or tennis court, a golf course generates revenue."

Ed Alley, Ft. Pierce branch manager for Hazen and Sawyer, agreed the idea has application in other areas, but warned that each site is unique.

"Your ultimate goal is to comply with regulations and clean up the ground-water contamination," Alley said. "If you can do that and incorporate a public recreation project that is self-supporting, you've got a situation in which everyone wins."

Continued on page 19

Contaminated ground water treated, used on Fairwinds GC

By MARK LESLIE

Refrigerators, cars, tires, construction debris. All this and more was on the St. Lucie County landfill property, said course architect Jim Fazio.

What looked like a sorry spot to build a golf course is now expected to draw 80,000 rounds in its first year of operation. But getting there was not easy.

"Cars were stacked up 30 and 40 high," said Chris Nelson, project coordinator at Guettler & Sons, which built the course. "To see it before and now, it is absolutely beautiful."

Ron Sigmon, the county's project director and special permitting agent, said the major problem at this and many other landfill sites was petroleum products. Contaminants come from engine blocks, gasoline, diesel,

Continued on page 19



Heavy, metal trash filled the St. Lucie County landfill, left, before Guettler & Sons and architect Jim Fazio turned the site into Fairwinds Golf Course, above.

Iowa State setting the stage for course construction degree

AMES, Iowa — A golf course and landscape construction course believed the first in the country, is being designed at Iowa State University.

Dr. Nick Christians of the Horticulture Department said, if approved, the program will probably begin in the fall semester of 1994.

Reception to the idea "has been excellent," he said. "A lot of very positive comments have come in from around the country."

Though it is improbable it will begin next fall, Christians said interested students could get a start in the basics by enrolling in horticulture and turf management.

The four-year major in the Horticulture Department will combine basic science and communication with horticulture, design, engineering and business skills.

The curriculum will also include entomology, plant pathology, agronomy, computer-aided design and video imaging.

He said more graduates from Iowa

State's golf course management program have been entering the course construction field the past few years.

Christians said: "Right now, we're at the fact-gathering stage. We have to submit a proposal to the board of regents for approval. It's moving quickly."

Avoiding college politics, Christians said the program would not compete with landscape design.

"We want to work with that program, not in competition. We're trying to teach the intermediate person who will implement the design, not the designer himself," Christians said. "The golf course area will be a specialization, though some studies will overlap."

Iowa State will draw on existing faculty for most of the instruction, and the proposal calls for hiring an additional instructor experienced in both design and construction."

Interested people can contact Christians at Iowa State at 515-294-0036.

Uwharrie Point wins accolades

MONTGOMERY COUNTY, N.C. — North Carolina's newest golf course opened here in mid-July to rave reviews from members and guests.

The Old North State Club at Uwharrie Point, a lakeside course designed by Tom Fazio, is "an outstanding course in every respect," said Dick Aultman of Charlotte, who will serve as head instructor at the private club on the shores of Badin Lake. "This is one of Fazio's finest creations. It has everything necessary for greatness: length, beauty, challenges, terrain ... the works!"

Fazio said: "I am especially proud of this course. It is unique in many respects, including terrain, variety of vegetation, and the vast amount of shoreline it occupies."

Fazio was involved in the initial planning stages and laid out the course to take full advantage of the unusual site from an environmental and playability standpoint.

Fifteen holes have a view of Badin Lake. "We were able to take full advantage of the lake, several streams and the area's wetlands to provide challenges as well as scenic splendor," Fazio said.

The par-72 layout features four sets of tees measuring from 7,102 to 5,131 yards.

Contaminants treated, used on golf course

Continued from page 17

solvents, alcohol, and petroleum-based household products.

The danger was so great that all water had to be contained on the property, even rain.

The international engineering firm of Hazen and Sawyer designed a system of 12 horizontal interception wells that pump ground water. Twelve- to 20-foot-deep horizontal trenches and about one mile of 6-inch pipe run beneath the surface. Each well has a gallon totalizer to determine how much water is pumped. Operators can calculate how fast and which way the water is moving.

"We took initial readings last December, and will take further readings this December to see what effect we're having," Sigmon said.

Ed Alley, Ft. Pierce branch manager for Hazen and Sawyer, said water was pumped from the wells to air strippers, huge cooling towers in which volatile organic compounds are removed. He explained that, in this new technology used in grove areas, water is pumped to the top of the tower and flows downward over baffles. Fans force air in and blow it upwards. As water strikes the baffles and is broken into small droplets, air passes by, and volatile compounds are removed.

Secondary treatment occurs in the five ponds on the property which are equipped with fountains. Tertiary treatment is performed by irrigation.

While Hazen and Sawyer was handling the high-technology angle, Fazio and Guettler were at work on a special course design

World's attention

Continued from page 17

Alley termed the Fairwinds project "a long-term remedial action program... It is a way to treat and re-use 500,000 gallons a day of water."

It also means a huge savings to the county. Monitoring the landfill, which had been closed in 1978, officials knew contaminated ground water was about to reach neighboring wetlands if action wasn't taken.

Hazen and Sawyer, brought in to study the situation, said the county had three options:

- Formally close the landfill and just monitor it. This had the lowest capital cost at \$4.3 million, and would run \$150,000 for operation and maintenance per year. But, the county would have to collect and treat the ground water once contamination

reached unacceptable levels.

- Formally close the landfill and collect water through a well system, treat it and dispose of the effluent through spray irrigation. Capital outlay: \$5.4 million. Annual operation and maintenance cost: \$171,000.

- Incorporate a golf course into the closure plan, collect the ground water, treat it and spray irrigate it for the course. Capital cost: \$7.4 million Initial annual outlay for monitoring: \$260,000.

The first two options would continually lose money. The third would produce revenue. When the National Golf Foundation projected a golf course would break even after five to seven years, the decision was easy for the Board of County Commissioners.

The Florida Department of Environmental Regulations and the U.S. Environ-

mental Protection Agency agreed to the proposal and, today, it's a reality.

By all accounts, Fairwinds is far exceeding financial forecasts. Less than eight months after opening, it had rolled up 51,000 rounds and \$1 million in revenue — compared to NGF's projection of 42,000 rounds and \$1,088,000 for the entire first year.

And, proven successful, it has turned heads from Arizona to England and Germany.

Sigmon said he has received calls from around the world from people wondering how the project has worked.

Indeed, Delucia County in Florida decided in September to build a similar project on a landfill there. Guettler & Sons, who did the St. Lucie County course construction, and Hazen and Sawyer will work on the project.

meant to contain water on the site.

Guettler built a berm around the course that will handle up to a 50-year flood stage.

Dealing with a trench-and-fill landfill, they had to make sure everything was covered by two feet of dirt and they had to vent out air pockets where gases could accumulate.

"We could put in lakes anywhere there wasn't landfill," Fazio said, "and we built swales that redirect rain to drainage pipes leading to the lakes."

POSSIBLE ELSEWHERE

Can this system be installed elsewhere?

Sigmon said: "A lot depends on the contaminants. Petroleum products are common. But if you have a lot of pesticides you can't get

rid of them with an air stripper."

Alley said: "The process of cleaning up the water is unique to each site. You have to match the process with the site."

"Some other things you see in landfills are iron, heavy metals, garbage. Some landfills are used to dump unprocessed solids from wastewater treatment plants and solids from septic tanks... That can also be treated but with another process."

Alley said St. Lucie County's type of treatment system could not be done in areas where there is underground radiation. Also, he pointed out, in St. Lucie's case, they excavated down to the ground water and dumped the trash. "Up North (where landfills are

above ground) contaminants have to go 200 feet deep to reach water."

Sigmon said it is costing \$260,000 a year to perform the ground-water testing for all types of contaminants. At the end of the year, if he has found nothing, he will meet the U.S. EPA and Florida Department of Environmental Regulation and ask to be allowed to cut back.

"Each year the monitoring costs will decrease, unless something shows up," he said.

In the meantime, golfers have what Fazio termed "a good golf course they can play fast and enjoy."

He added: "Now the county can give the public something and turn a profit rather than a loss."

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