

GOLF COURSE  
INDUSTRY  
2007  
**Builder  
Excellence**  
AWARDS

# FROM SUPERFUND TO supersite



On the course at Liberty National Golf Club, there's as much as 45 feet of fill above the cap in some spots. Photo: Philip Sokol



About three million cubic yards of soil were brought in to cap the site before construction. Photo: Philip Sokol



## A development project turns an EPA waste site into a golf course gem

BY GCI STAFF

**R**eal estate's popular idiom stresses the importance of location, and Liberty National Golf Club in Jersey City, N.J., might have one of the best.

On the banks of the Hudson River, in the shadow of Manhattan's skyline and under the watchful eye of the Statue of Liberty sits Liberty National Golf Club. More than a dozen years went into developing the course that stretches as long as 7,500 yards.

Professional golfer Tom Kite, who teamed with golf course architect Bob Cupp to create the course, dates his involvement with the project to 1992 when he participated in a corporate outing at the TPC at Avenel for a law firm in Washington. There he met Rusty Bayliss, vice president, commercial, for the London and Scottish Marine Oil Co.

"He had a dream of turning this site into something useful," Kite says. "It was a wasted piece of property."

Cupp refers to the site as 100 years of industrial sins because of its history as an oil refinery and Army base.

It's one of those once-in-a-lifetime projects because of its location, says Rowland Bates, executive v.p. and executive project director of Willowbend Development, owner of the club.

"This is something special and won't come along again, I think," he says.

When Dan Fireman, president and c.e.o. of Willowbend, first visited the site, there were

eight warehouses cluttering the view. Even then he could see potential.

"I came out, saw it and said 'wow,'" he says. "Without a doubt, the majority of the land was blighted. It didn't look good."

Jon O'Donnell, division president of Heritage Links, the builder, was in awe of the views when he first visited.

"It's the most spectacular view of any metropolitan city in the world for a golf course site," he says. "It was a tremendous site observing our bulldozers and finish tractors working in the shadows of one of the most visible attractions in the world – the Statue of Liberty."

### ATTENTION TO DETAIL

About three million cubic yards of soil were brought in to cap the site before construction. Then another one million was imported to enable the architects to establish the final contours.

"It took a lot of time, thought and effort to make sure this thing was contained," Fireman says. "But there's nothing that's extremely toxic under the site."

Being a brownfield site, plans had to be exact.

"We had to follow very specific designs," Bates says. "We needed to know exactly where we were on the site. It was an extremely difficult and costly project from that aspect ... and we did it in record time."

The drainage installed throughout the course, especially the driving range, was very deep at times, O'Donnell says.

"Heritage Links monitored all installation and exact location of installation with their GPS survey instruments so that depths – because of environmental capping – weren't exceeded," he says. "A liner was installed during the environmental mitigation of the site and couldn't be penetrated during course construction."

When designing the course, Cupp says the team had to be extremely cognizant of the underground and couldn't go deeper, only higher, with features.

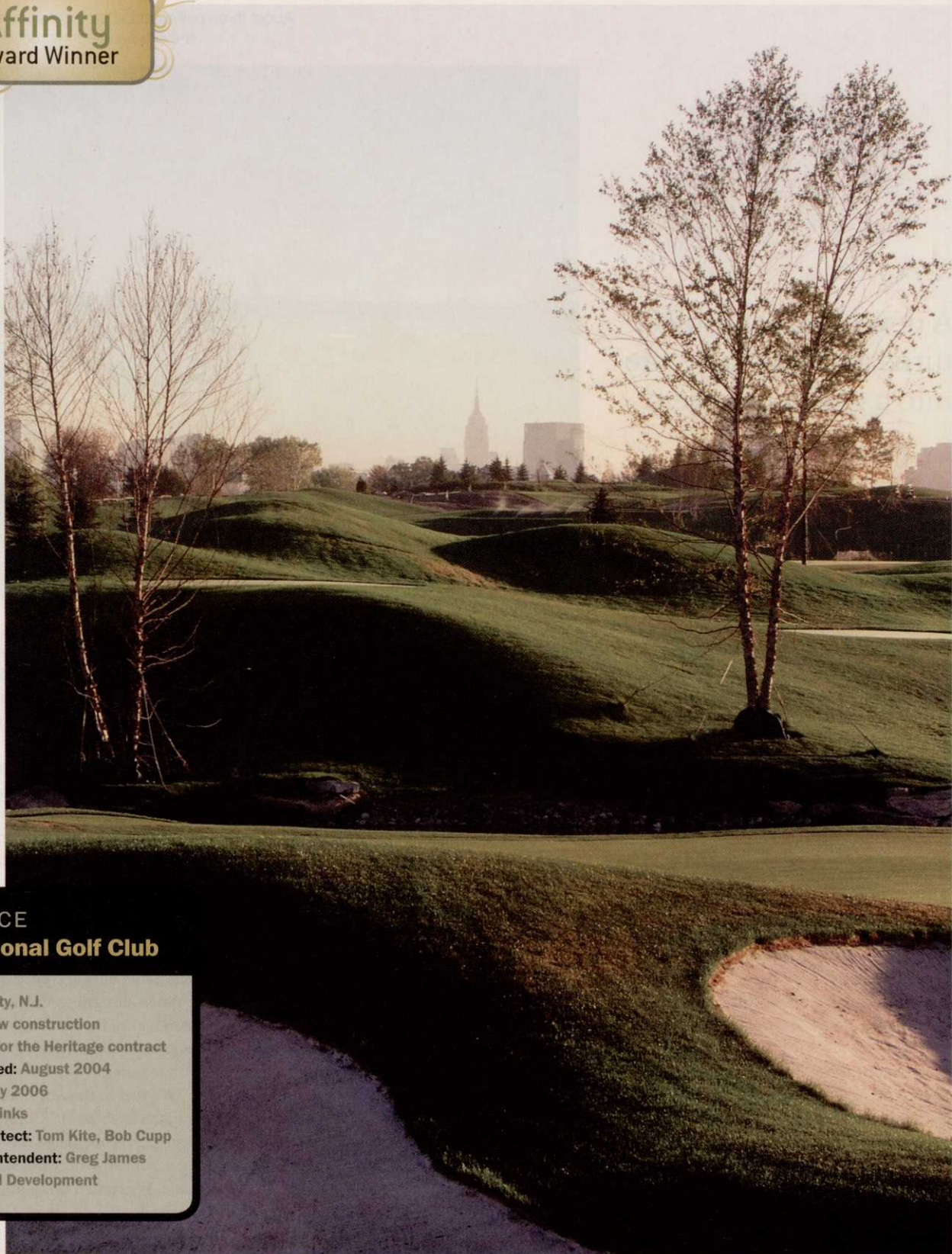
"We had to use our brains below the ground as much as above it," Cupp says, adding that the biggest type of change was altering or eliminating a bunker – no wholesale changes could be made. We routed this golf course until we were purple."

Kite, who says there's as much as 45 feet





Because the owner requested 11 to 12 months of grow-in time before opening, working hours increased to 80 a week for two months during the summer so the grassing could be completed in the fall. Photo: Philip Sokol



**AT A GLANCE**  
**Liberty National Golf Club**

**Location:** Jersey City, N.J.  
**Type of project:** New construction  
**Cost:** \$7.8 million for the Heritage contract  
**Construction started:** August 2004  
**Course opened:** July 2006  
**Builder:** Heritage Links  
**Designer and architect:** Tom Kite, Bob Cupp  
**Golf course superintendent:** Greg James  
**Owner:** Willowbend Development



of fill above the cap in some spots, says he's never been part of a project with such exacting specifications.

"We ended up with one of the most detailed sets of drawings that had ever been done," he says. "Once the plans were drawn, the golf course had little variation from what had been drawn. We really had to follow the plans. It's a good thing Bob and I are believers in the plan. It's expensive pushing paper ... it's a lot more expensive pushing dirt."

#### SOIL SALINITY, SCHEDULE

Being a reclamation site, the builders and designers had many problems to deal with. For golf course superintendent Greg James, it was countering the high salinity in the soil that was atop his list. Much of the capping materials were dredged from the bay and nearby rivers, so the sand and soil have high salt content. To combat this, James enlisted cultural practices of applying gypsum and PhysioCal to leach the sodium out of the soil. He conducted monthly soil tests that indicated everything was in normal range.

James says the 5,200 sprinkler heads were another big chore, but he has the benefit of an internship program to add qualified workers to his staff.

Having started work on Liberty National in August 2004 and faced with the task of completing grassing within a year, Heritage Links encountered tight deadlines. The crews – led by project manager Grayson Cobb and project superintendent Chris Veal – started working long hours (six days a week, 12 hours a day) in May and June. The exceptionally dry weather helped Heritage complete its tasks. Because the owner requested 11 to 12 months of grow-in time before opening, working hours increased to 80 a week in July and August so the grassing could be completed in the fall.

#### UNDER PRESSURE

All who worked on the project felt pressure to get the job done in a spectacular fashion because it's a high-profile job.

"The pressure to not screw it up – to do the best course – was huge," Cupp says.

"Both of us felt pressure," Kite says about he and Cupp. "But I don't put the word 'pressure' in a negative connotation. You put yourself in something exciting. It allows the adrenaline to start pumping. I put myself on the line because I love that feeling."

James admits to feeling pressure, but insists it's no different than what any other superintendent feels.

"In this business, everybody is under a lot of pressure no matter what," he says. "I put a lot of pressure on myself. If you have the resources – like we do – everything should get done and done right."

Fireman, who provides those resources, says excellent preparation relieves any pressure he might feel.

"It wasn't pressure, it was exciting," he says. "You get so focused on just trying to get it done."

#### MAJOR EXPECTATIONS

With an overall price tag near \$150 million, Liberty National wasn't conceived merely to host member-guest outings and weekend golfers. The membership cost of about \$500,000 will make the club exclusive, but playing host to the world's best golfers and the game's most prestigious events will place the club on the map.

"It's not a matter of if, it's a matter of when," Fireman says about hosting championships such as the U.S. Open or President's Cup. "But we're in no rush."

Kite says he and Cupp designed the course

with tournaments in mind – making space for parking, concessions, hospitality tents, grandstands and everything else associated with tournament golf.

"The location and site dictated the quality of golf course we built," Kite says. "Not every golf course has the opportunity to play host to [PGA and USGA] championships. This gave us an opportunity to think way in advance of our history, looking 20, 30, 40 years from now."

Cupp and Kite spent a lot of time to have the course ready to host a major tournament without having to do much of the extra work that goes into preparing for an event.

"It's like pulling off a 2.5 with a full twist in front of 100,000 people," Cupp says using a diving analogy. "This is my defining moment, and I don't plan on retiring."

And Kite puts Liberty National in a competitive light.

"Just as there are golf tournaments and major championships, there are golf courses and major golf courses," he says. "This is at the top of the list. This is the U.S. Open of golf course design." **GCI**

*Editor's note: A longer version of this article can be found on page 38 in the January 2006 issue.*

### What the judges said

"There was a stunning scope of work with the liner and some of the other pieces to that puzzle. It was just an overwhelming project in light of the 8,000 tons of disposal they took out of there"

— **Charlie Birney, managing director of The Brick Cos. in Edgewater, Md.**

"It's by far the biggest golf course construction that I have ever seen or heard of – all working with nine different entities trying to coordinate everything and building everything and doing it on time and on budget."

— **Terry Buchen, president of Golf Agronomy International in Williamsburg, Va.**

"Clearly this is a once-in-a-generation-type project. One that shows how golf can help recreate the environment, will be good for the environment and, of course, with the setting, which is spectacular but also difficult for construction and access."

— **Jeff Brauer, golf course architect and president of GolfScapes in Arlington, Texas**

"Not only did they have to deal with constructing a new golf course in a very tight and constricted area in New Jersey, it was also an EPA toxic waste clean up site. Throughout the project they had to be aware of any liners that were set in place to cap the toxic waste. They installed about 10 miles of pipe with no breaching of the liner. That with the amount of GPS work that would have to be done in importing, that shows that that project was pretty incredible."

— **Joe Livingston, CGCS, River Crest Country Club in Fort Worth, Texas**