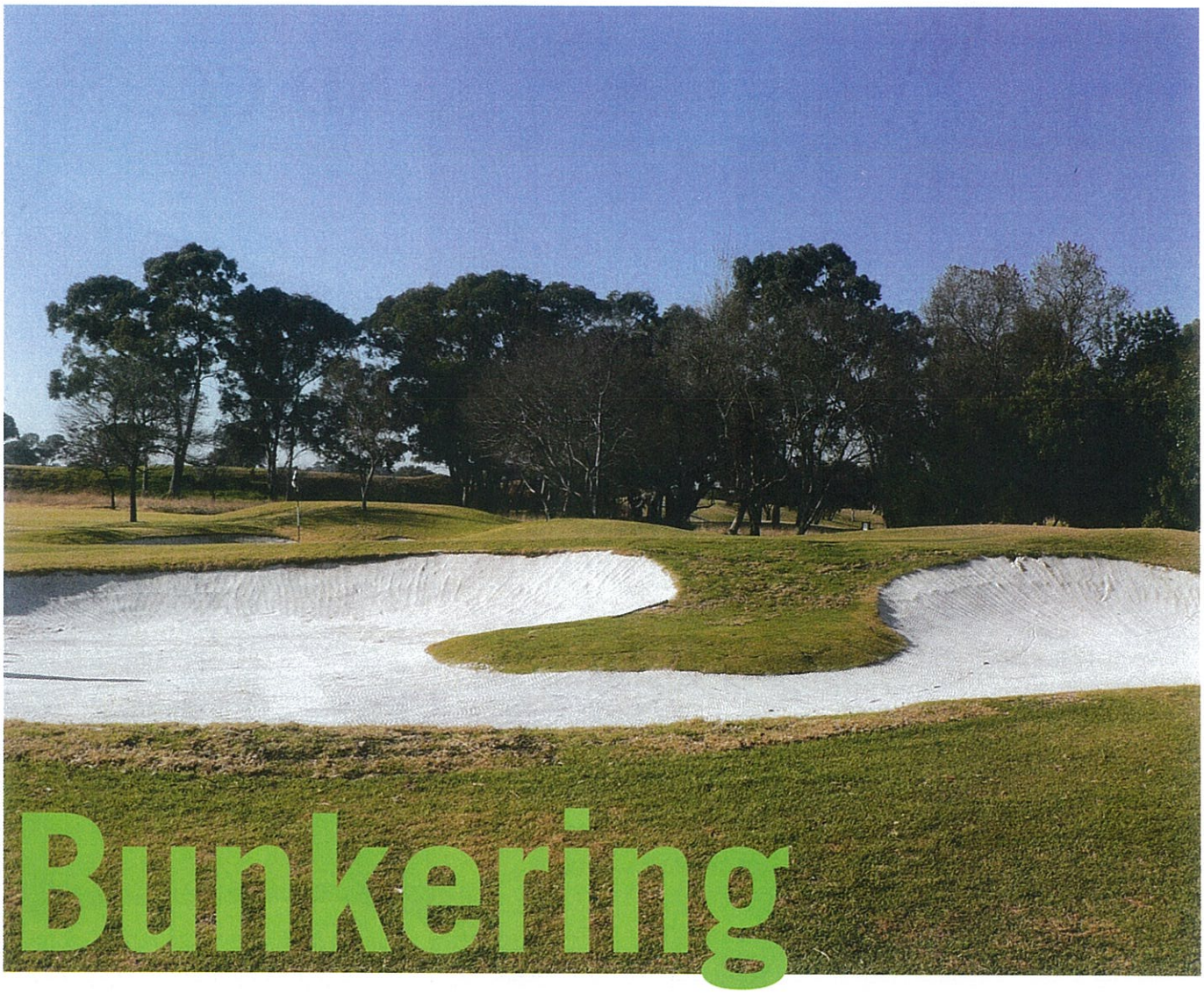


Bunkering AND BANG FOR BUCK

In the first of a series that takes us through a case study of bunker renovation, Golf Data's design principal **Sean Quinn** explains the process of transforming what might be a rather ordinary hole or group of holes into something rather special - simply by redesigning and constructing existing or new bunkers.

Bunkers are one of the original hazards that date back to the earliest records of the game being played. Long before the likes of water features or out-of-bounds stakes were used to add spice to the art of propelling a ball from one area to another and eventually coaxing it into a hole, bunkers (the natural areas of loose sand) existed. Before the rules had evolved to make special provision for ways in which a defined hazard was treated, (the ball was simply played as it lay), mastering the technique of extricating a ball from a hole filled with sand, a dune or sandy furrow was part of becoming an accomplished player, and has remained an integral part of the game.

As the game spread from the sandy links of Scotland to the rest of the world, and inland courses eventually vastly outnumbered the original varieties, bunkers not only remained, but became a critical element of every great layout – playing a role in both the strategic strength and aesthetic values of golf courses. Big, small, deep or shallow, bunkers can be placed strictly to strengthen shot values, define holes, or in some cases to act as a barrier; actually helping a player by trapping a ball before it rolls out of bounds or into a water hazard. Increasingly, a trend has emerged where bunkers are positioned to provide only assistance to players, i.e. as a 'sighters', where the direction of play is unclear.

It is hard to imagine a conventional course without bunkers, and for many years Nelspruit Golf Club's course (not counting old desert-type layouts with sand greens), was the only grassed layout in the country that was completely devoid of them.

'IT'S 10 YEARS SINCE THE LAST MAJOR RENOVATION WAS DONE AT THE COUNTRY CLUB JOHANNESBURG – WOODMEAD COURSE'

"For an existing course to upgrade both its visual appeal and its levels of challenges, there is no better way than to invest in a bunker rehabilitation project," says Sean Quinn. "In terms of 'bang for buck', this can be far more cost effective than many clubs believe, and certainly costs considerably less than undertaking major redesigns. Adding or improving bunkers is also the quickest way to vastly improve a course," he says. "If the project is properly planned, this process will cause the minimum amount of disruption and play can continue – unlike say, rebuilding greens and remodelling greens complexes," he adds.

It has often been stressed in this publication that the services of a professional course architect is critical when planning or making changes to a course, and often an ad hoc decision by a committee to make changes in an effort to improve a layout can have the opposite effect. "When considering a bunker renovation project, or any other design changes, it is important to have a master plan," says Quinn. "Whether the proposed plan is for changes to be made on only one or a few holes, this should fit with the overall look and feel of the course. Where well-meaning improvements have been made, be this to bunkering or any other area, they shouldn't stick out like a sore thumb," he adds.

He explains the motivation and planning of the work on the Woodmead layout. "It's 10 years since the last major renovation was done at The Country Club Johannesburg Woodmead course. In 2007, the Rocklands course was extensively modified; since then the members have indicated that the Woodmead bunkers were not performing quite as well in terms of playability as the new bunkers on the recently renovated Rocklands sister course. Most of the complaints related to a combination of either plugged lies or thin





TOP: A view of 5th hole from the tee before the bunker project.
ABOVE: The 5th tee after (taken in mid-winter). Note the trees on the left side were trimmed for better visibility of the combined bunkers on the left; also note that the greenside bunker is now visible from the tee.

sand, and the once-white silica sand had turned brown and become contaminated, which adversely affected the aesthetics of the layout.

"In 2010, the golf club committee set up a project sub-committee who were tasked to produce a five-year programme for both courses at the Country Club. From this exercise, the Woodmead bunkers were identified as the main priority for 2011." Quinn explains: "Given Golf Data's long-term involvement at CCJ, we were approached to assess the old bunkers and come up with a solution.

"Our initial brief from the club was to simply replace the sand to improve playability, but given the course's high profile and every year hosting the Telkom PGA, we grasped the opportunity to give the course a subtle facelift. After an in-depth assessment, we identified that:

- Many of the bunkers, particularly on the uphill holes, were hardly visible from the tees and landing areas due to the grass face ingression and raised front lips where bunker rake machines enter and exit.
- Some fairway bunkering was obsolete – a common problem on older courses where hazards are simply no longer in





LEFT: The 8th green before.
BOTTOM: The 8th green was much improved with the bunker on the left flashed up against the green to highlight the best pin position back left.

'MANY BUNKERS WERE ORIGINALLY BUILT WITH VERY STEEP SAND FACES, BEYOND THE NATURAL ANGLE OF REPOSE FOR SILICA SAND, MAKING IT EXTREMELY DIFFICULT FOR THE GREENKEEPING STAFF TO MAINTAIN CONSISTENTLY FIRM SAND ON THE FACES'

range, what with the combination of modern equipment and the latest golf balls, (as well as swing techniques now generating greater speeds). We felt that often longer players off the member tees had too little bunker strategy to contend with, where shorter hitters had to negotiate more. Good players on many holes sailed over the fairway bunker strategy, so we designed additional bunkers to tighten the longer landing areas.

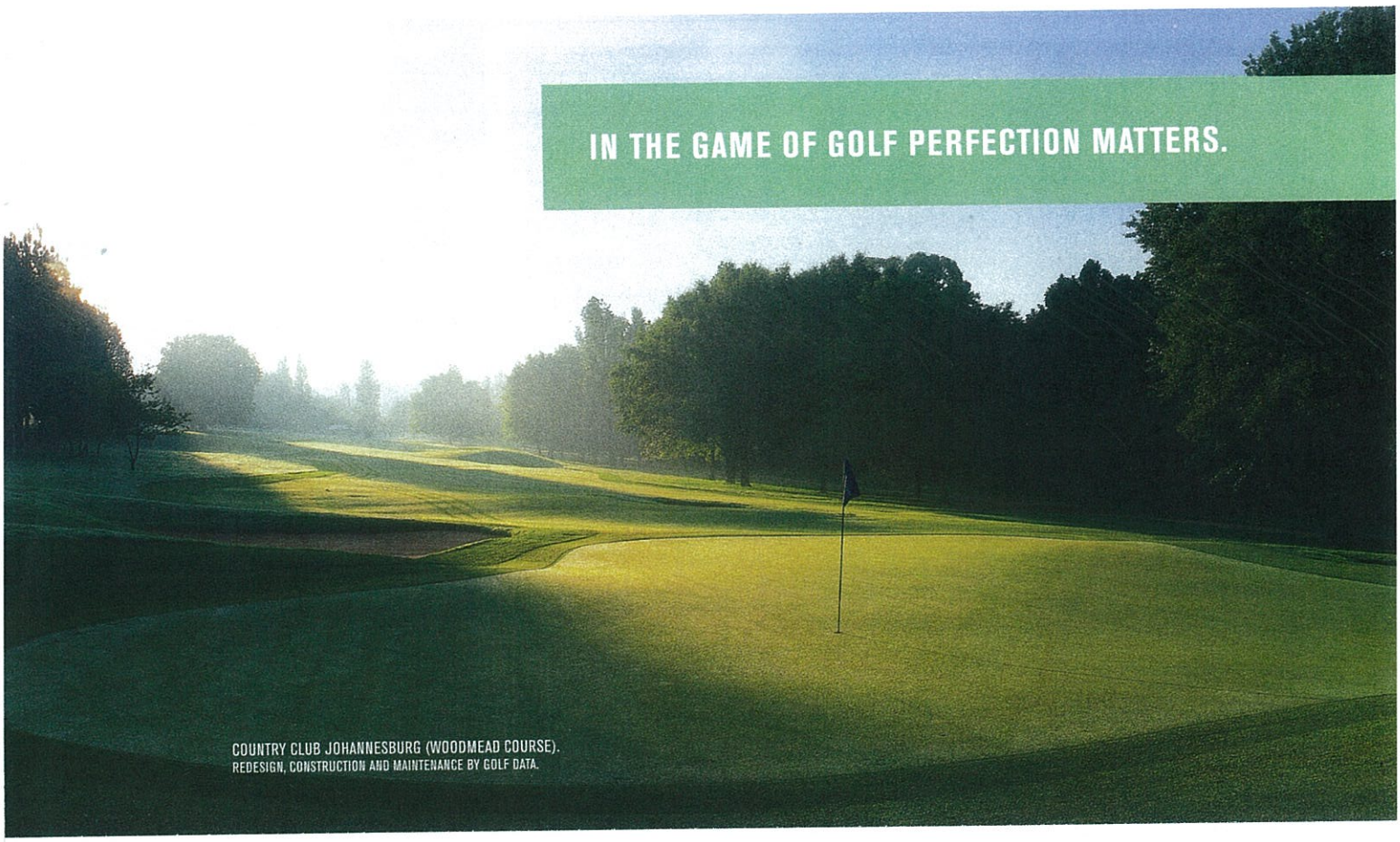
- Many of the greenside bunkers didn't relate to the associated greens, so we moved them in as close as we could without affecting greens mowing practices.
- Some of the fairway bunker clusters were very penal to the high-handicapped player, so we combined bunkers on holes 5 and 16 to create larger sand areas with lower faces; this would allow high handicappers to progress further.
- Many bunkers were originally built with very steep sand faces, beyond the natural angle of repose for silica sand, making it extremely difficult for the greenkeeping staff to maintain consistently firm sand on the faces.
- Some of the larger bunkers gave many of the players access headaches; in these cases we extended and lowered the grass 'noses' into the bunkers so as to reduce the distance a golfer needed to rake on exit."

The construction programme agreed to would run over 10 weeks; this would be very easily achievable if this was just a sand replacement project, but some of the changes, although appearing to be subtle, would actually be quite substantial.

From week one, a Friday morning progress meeting between the construction crew, designer and the sub-committee was implemented. A progress report and updated programme were tabled each week; this was followed by a site drive-through to assess the week's work and to review the next week's work.

DRAINAGE

When the bunkers were first built, the internal bunker drainage was wrapped in a geotextile envelope. This protected the drains from any kind of contamination and blockages over the years; but fortunately, on inspection most of these drains still functioned as well as they did when first installed. This saved the club a lot of money – only the bunkers that were significantly changed, or new bunkers required new drainage. Overall less than 300 linear metres of new drainage was installed on the entire project. ■



Golf Data is proud to have been associated with Country Club Johannesburg since 1999, a course that is noted by Compleat Golfer as being a "consistent 'traditional' 5 Star Award Winner", and a course that is currently and consistently in Golf Digest's Top 10 ranked courses (Inland Region SA).

One of the 'secrets' to CCJ's success is the club's commitment to constantly update and modernise their already superb layout, and working together with Golf Data this has been done cost effectively and with minimal disruption to their annual rounds. Golf Data provides specialist renovation & design services that includes updating of bunkering and drainage (CCJ), resurfacing of greens (Humewood CC & Durban CC) as well as major course reconstructions (Leopard Creek). Having been awarded 5 Stars in Compleat Golfer's Golf Experience Awards we are proud to include CCJ as part of our growing list of benchmark & award winning courses that we are associated with that include Leopard Creek (Reconstruction), Pearl Valley (Construction & Maintenance), Simola (Co-developer & Construction), Pecanwood (Construction & Maintenance), Serengeti (Construction & Maintenance), Oubaai (Construction & Maintenance) & Houghton (Reconstruction & Maintenance).

To join forces with the leaders in the South African golf industry, be it for the design, redesign, development, construction or maintenance of golf courses and estates call Robbie Marshall on (021) 851 2193 or email headoffice@golfdata.ca.za. **To view Golf Data's full portfolio of successfully delivered projects visit www.golfdata.co.za.**

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