



The new bunkerless design at Eisenhower Golf Course uses cleverly crafted contours and mounds to create interest, avoiding the cost of building and maintaining bunkers.

EISENHOWER GOLF COURSE

A SUSTAINABLE MODEL FOR A NEW ERA OF GOLF

BY BRAD KLEIN

In an era when golf course managers are getting rid of bunker rakes, golf architect Andrew Green did one better – he got rid of the bunkers.

All 56 of them are gone in his overhaul of Eisenhower Golf Course in Crownsville, Maryland. The popular municipal course, located 23 miles south of downtown Baltimore, is just coming out of a major renovation that includes new greens, regrassed fairways and roughs, an expanded practice complex and extensive stream bank enhancement. The woodland layout, originally designed by Ed Ault and opened in 1969, is owned by Anne Arundel County. The Recreation and Parks Department oversees the 175-acre facility, with day-to-day course operations contracted to a management company.

The course closed down in October 2018 for renovation and will reemerge for play sometime next spring. The course used to see 55,000 golfers a year back in its heyday of the 1970s and 1980s, but between increased



Enhanced drainage, improved grasses and an upgraded irrigation system make it easier to maintain firm conditions and optimize the architecture.

competition from a spate of new courses in the area and the increasing toll that use and age took on the property, the layout lost a lot of its luster. Recent play levels averaged 36,000 rounds a year until closing and the deterioration of the golf facility was evident.

When applied to golf courses, the term “tired” covers a multitude of sins. At Eisenhower they included overgrowth of tree canopies, stream bank erosion, soft turf conditions due to poor drainage and inadequate topdressing, and bunkers that washed out and didn’t drain well. Compounding these issues was the fact that Eisenhower was planted with cool-season grasses for fairways and roughs that demanded a lot of water – something that the single-row irrigation system could scarcely deliver. Cart paths, only 6 feet wide, were in disrepair thanks to surface cracking as well as damage from tree roots.

When the county took over course operations, Damian Cosby, PGA, chief of Anne Arundel County golf operations, knew that serious work was needed on the property. In a previous incarnation as general manager of Ocean Pines Golf Club on the Maryland Shore he had been impressed with the work of a young, aspiring golf architect named Andrew Green. Back then, Green was a field manager and in-house architect for the golf course construction firm of McDonald and Sons.

Green hung up his own design shingle in 2014 and has since performed a dramatic restoration of Inverness Club in Toledo, Ohio, along with other high-profile jobs like working on the East Course at Oak Hill Country Club in Pittsford, New York, the Blue Course at Congressional Country Club in Bethesda, Maryland, and Scioto Country Club in Columbus,

Ohio. Green's historic restoration projects entail research that he undertakes with museum-quality diligence, but none of that would work were it not also for his grasp of agronomic and infrastructure needs on a golf course.

At Eisenhower, Green was focused on improving the existing routing while maximizing playability and long-term sustainability. The fundamental design breakthrough of the project came as Green was walking up the 18th hole one day and turned to Cosby and asked: "What do you think if we take out all the bunkers?"

"Are you out of your mind?" responded Cosby. "Well," answered Green, "just think about it."

Overnight, Cosby began to consider the potential savings. Construction costs alone for 56 bunkers would run around \$250,000. Then there were all those labor hours raking more than an acre of bunker sand. Plus the costs of replacement sand and future bunker renovations. "And this was the part of the golf course – bunkers – where we get the main complaints from golfers," said Cosby.

Cosby brought the idea to his immediate superior, Recreation and Parks Department director Rick Anthony. He had the same initial reaction, followed by a similar evolution of thought. That sealed the deal. Now, how would Green make play interesting if there would be nothing but turfgrass cover out there?

An astute researcher of design history, Green had been fascinated by a technique in golf architecture that classic architects termed "Alpinization" – referring to the widespread use of irregular mounds and slopes to create interest. He traces it back "to the influence of English architects like Herbert Fowler and J.H. Taylor, whose early 20th century work in the heathlands around London came to rely

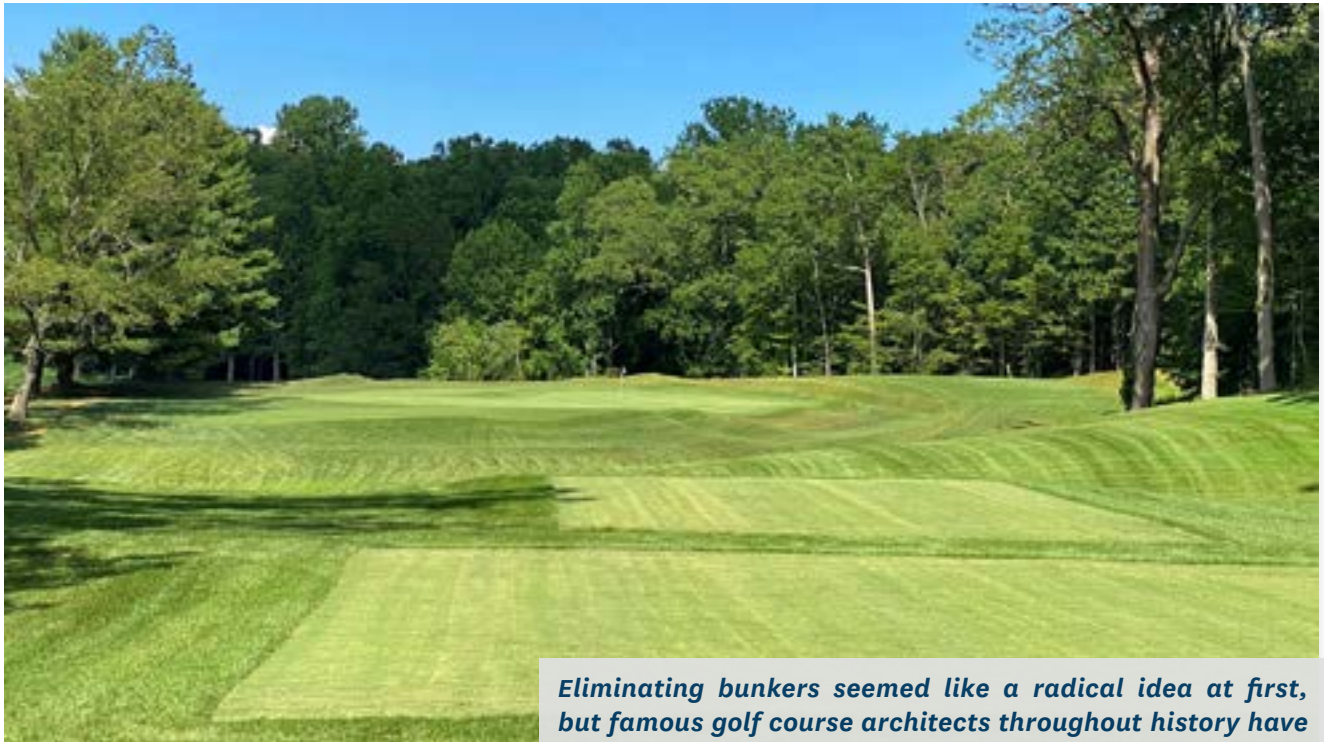
upon exaggerated landforms rather than overtly punitive hazards." Elements of this work migrated to the U.S. in the hands of Devereux Emmet, George Thomas, Walter Travis and A.W. Tillinghast.

For mounds and slopes to create sufficient interest, Eisenhower would need firm conditions for the ball to roll and react when it hit these features. This required major fairway drainage improvements, as well as opening up playing corridors through densely overgrown tree cover. Deployment of a more efficient, double-row irrigation system with tighter spacing than the existing single-row system would also save on water use while maximizing the effectiveness of the water that was applied.

Turf selection was also crucial. Green describes Eisenhower's former fairway mix as a "hodgepodge of grasses – including ryegrass, common bermudagrass, nutsedge and kyllinga." The fairways are now 'Latitude 36' bermudagrass, a durable turf developed with USGA-funded research. This grass was selected for its modest irrigation and plant protectant needs along with its ability to handle both the warmth and notorious humidity of the mid-Atlantic summers along with the cold winters.

The roughs have been established anew with turf-type tall fescues. Improvements to the cart path system will mean greater control of traffic and less wear and tear. The cart path system has been reestablished into a continuous loop, paths have been widened out to 8 feet with curbing along tees and greens, and all paths have been resurfaced with asphalt.

The greens have all been rebuilt according to USGA recommendations. The old mishmash of bentgrass and *Poa annua* on the greens has been replaced with freshly sodded 'A1-A4' bentgrass. With 17



Eliminating bunkers seemed like a radical idea at first, but famous golf course architects throughout history have relied on slopes and landforms to challenge golfers.

of the greens in the same basic position as before – the only exception is the new fifth hole – and the hole corridors having been preserved, golfers playing the “new” Eisenhower should perceive it to be a continuation of the old one, though a course that is dramatically improved.

The big change, of course, is the elimination of all bunkers. The savings on bunker maintenance will be reallocated to preparing the main playing surfaces, which have all expanded as part of the renovation. Fairways have gone from 17 acres to 29, and the greens have been expanded from an average of 6,000 square feet to 6,400.

“The big change, of course, is the elimination of all bunkers. The savings on bunker maintenance will be reallocated to preparing the main playing surfaces.”

In overseeing the improvements at Eisenhower, Cosby said he kept in mind the popular golf course’s client base. “We have strong local support,” he said. “Golf here is affordable. It’s also walkable, with over a third of our golfers carrying or pulling their own golf bag. We get lots of play from seniors and retired military. We acquired the course because we wanted to provide public recreation for county residents and we intend to keep it that way.”

The overall budget for the golf course improvements is \$5 million. Another \$6 million, separately programmed, was designated for restoring 6,000 feet of Broad Creek that meanders across and around the property. Plans for a new clubhouse have been put aside for now. When folks return to play Eisenhower they'll be using a temporary structure. Given the unforeseen disruption caused by the social distancing measures to limit the spread of COVID-19, the delay might work in the facility's favor since special redesign measures may be needed.

Between its bunkerless presentation and the new turf, Eisenhower Golf Course might well emerge as a model facility for the future of public golf. The strategic ground game is interesting and fun, and the agronomics of the course will provide for a firm, fast surface that maximizes ball roll and creativity in play. All of that combines to make for a golf facility that is more viable economically and more sustainable ecologically as the game moves into a post-pandemic era.

Brad Klein is a veteran freelance journalist whose biography, "Discovering Donald Ross," won the Herbert Warren Wind Book Award for 2001.