

CADD-E-Shack making computer course design available to everyone

By PETER BLAIS

MANHATTAN, Kansas — With an increasing number of municipal, residential and commercial mixed-use golf projects requiring computer-aided design (CAD) drawings, a year-old Manhattan company called CADD-E-Shack Golf is filling a niche by offering architects and others in

the golf industry outsourced CAD technology.

Company founder and President Dave Relford has architects send in their drawings, complete with coffee stains, bread crumbs and red pencil marks.



Dave Relford

He inputs that information onto the computer, sends the plot file via electronic mail to a local print shop, and can often return the completed blueprints to the architect the same day. The architects mark up the

blueprints and the process is repeated until the final CAD drawings are generated.

"The architects don't have to ink drawings or put sticky backs down. Their comment is often how much time it saves them and frees them up to do other things," he said.

"Many architects don't want

to spend the money on [CAD] hardware or software, and you always have to hire someone to run the equipment, because these guys don't want to learn at 40, 50, 60 years of age. Sometimes the younger guys don't even want to mess with learning how to draw a line on the computer. That's what I do.

"You don't need a computer to design a golf course. But when it's required [by others] it's nice to have, and you might as well do it right. It's a luxury to have me on the team taking care of the little issues, plus there is a golfing mind and steward of the game behind the work."

Among the architects Relford has worked with are Baxter, Dye, Spann of Houston and Don Sechrest of Kansas City. Architect Kyle Phillips of Granite Bay, Calif., said he has discussed outsourcing his CAD work to CADD-E-Shack. The idea, Phillips said, makes sense for a relatively small firm like his, which doesn't have the resources to purchase the latest equipment, keep someone trained in its use and employ both an extra worker and the CAD equipment on a full-time basis. It would be similar to the outsourcing of irrigation design that many architects employ, he added.

"The CAD drawings are particularly useful on residential golf projects when you are interfacing with other engineers, architects and planners," Phillips said. "It's also useful on a project where you do a lot of earthmoving, like in Asia. You can see beforehand how much earth you'll have to move and contour in order to achieve the balance you're looking for."

Relford grew up in Kansas City, Mo., where he was first exposed to golf at the city's Hodge Park Municipal Golf Course, working as a range boy and green fee collector. He began reading books on course design and eventually settled on golf course architecture as his career path.

He earned a landscape architecture degree from Kansas State University in 1995, completing an internship with a landscape developer at Arnold Palmer-designed Dakota Dunes in Sioux City, Iowa, and a maintenance internship at Loch Lloyd in Kansas City. After graduation, he worked with contractor Landscapes Unlimited, helping to build Quarry Oaks in Lincoln, Neb. The next stop was Arthur Hills, where he helped get the Toledo, Ohio-based design firm computerized.

"They had one computer collecting dust in the corner," he re-

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CADD-E-Shack

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membered. "In my three years we got up to a network of 11 computers. We went from a hand-drawing to an almost completely computer-based drawing system."

In April 1998, Relford decided it was time to return home to Manhattan and started CADD-E-Shack with the idea that: "Computers and golf design really don't mesh together too well. It [computer design] really isn't the preferred method. I'm a big believer that the best way to design is by hand, even though I'm the computer guy. But I saw a niche. As the industry has grown, CAD construction documents have become a requirement. A lot of the one-man and two-man design firms, and even some of the larger groups, don't have computers.

"It's expensive. I've heard horror stories of architects spending hundreds of thousands of dollars on software, but never getting any support from it. It's a hassle. There aren't too many guys [like Relford] out there with a landscape, architecture, golf course and computer background."

But that situation is likely to change, and Relford is prepared for it. "CADD-E-Shack won't be around forever. As the younger crop of designers come up who are more comfortable with computers, they'll do more of this work themselves. Hopefully, by that time, I'll be designing more courses," said Relford, 27, who has continued to do design work, his first love, for some area courses.

"I interpolate the architects' [hand] design work into the computer. I want my computer designs to look just like their hand drawings. There is a talent in putting their work into the computer and being able to get the quantity take-offs [earthmoving numbers]. You can't just take a guy out of Auto-CAD school and have him apply it to the design of golf courses...I usually do it for \$10,000-12,000 per project and set up my billing like an irrigation contractor."

CADD-E-Shack also offers a three-dimensional imaging service, which allows a developer or potential customer to see the course before it's built. The architect provides the two-dimensional plans, Relford downloads the information into the computer and the computer produces a three-dimensional view.

The 3-D drawing provides a view from various points on the course or even a bird's-eye view above the course.

"It's a real nice device for a renovation project," Relford said. "Dallas Country Club is doing a three-hole renovation using this. We did perspectives from the

landing areas, tee boxes and right in front of the green. We mounted them on 24-by-36-inch foam boards, the club put them on easels in the clubhouse and the members got to know what the design of the hole was going to be before they played it."

The perspectives are usually one-day projects and cost about \$1,000.

Relford is working on a third product with a company that

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— Dave Relford

makes computer golf games simulating existing golf courses. "What I thought," he said, "was

if they can make those games with existing information, why couldn't they make them with

proposed information. We're about ready to do the first one now. It allows you to play your golf course on a computer screen, view it with 18-hole flybys and that way market it before it's even built. It's gotten a lot of great feedback."

Relford is trying to get the price down to about \$25,000 and thinks it will be a valuable tool for developers looking to market their golf course before it is built.

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