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Moving and Shaping

From time to time, I get calls from engineering firms offering to "do my grading plans." I politely decline as I just can't separate grading from golf course design. And I wouldn't want to – "design" is about 10 percent of the business, and I do the other support work just to feel that thrill of "pure creation" occasionally.

I typically draw extensive grading plans for projects requiring public bids. Detailed plans allow accurate bidding and layout, but they do have some downsides – Golf course architects have no equal when it comes to changing their minds, and drawing 18 holes of plans over a few weeks to "get them out the door" usually results in repetitive design. It's better to "noodle" on designs over longer periods, and the best courses are typically built this way.

Since I was collaborating with Notah Begay III, and trying to build a great course, I emphasized more "face time" with shapers at Firekeeper, since the field is the best place to finalize green contouring and bunker placement.

One advantage of partnering with Landscapes Unlimited is that they don't need detailed plans on a gently rolling site like Firekeeper. I drew plans for all greens, a few unusual tees, the lake, and the three major fairway cuts. Most other features, such as subtle fairway shaping to move drainage and framing the hole, were simply sketched in and then discussed with the shapers prior to and during shaping.

The "field approach" requires the contractors trust that I wouldn't add last minute Sahara-sized bunkers that weren't in the budget. In addition, I needed to commit to being on site whenever needed, and inexpensive air fares made frequent, "last minute" site visits financially feasible, and cell phones and e-mailed pictures were used for reviews between visits.

Firekeeper was blessed with nearly perfect golf terrain and the absence of expensive rocky and wet soils. Most earthmoving is comprised of scraper hauls and localized, balanced (none hauled in or out) bulldozer cuts and fills.

About 90,000 cubic yards of scraper hauls came from the lake and three major fairway cuts. The cost of scraper dirt varies with the length of the haul. If we can haul cuts within the same hole or adjacent holes, it's very cost effective. Longer hauls slow down the process and add cost. The design placed the irrigation lake in the southeast corner of the property, only close to the southern end of holes 12-17. Landscapes Unlimited opted to place much of the lake cut on the 15th fairway to avoid long hauls, which required some field redesign of both that fairway and other greens where I anticipated hauls to be made.

Making such field adjustments is not uncommon and often results in better designs. Greens built with only localized bulldozer cuts and fills are less expensive and usually result in a more natural look. More importantly, working with the land provides a more unique green, built to fit its site, rather than a green that could have been built nearly anywhere else.

After bulk earthmoving, the shapers craft the "magic" we all love about golf courses. I can't stress enough how important shapers are to the quality of any project, and how important it is for the shapers and architects to be on the same page. Frankly, the shapers have to "get it" for our vision to be implemented.

When it works out the way it did at Firekeeper, it's nearly the perfect world – create a good product and have fun doing it.

That "10 percent pure creation" thrill was alive and well in Kansas for the Firekeeper design and construction team. **GCI**

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Design/Construction Journal

Over the next few months, Jeff Brauer's column will detail the ins and outs of his experiences participating in the design and construction of a new golf course in Mayetta, Kan.