

# Golf Course Construction and Cost Budgeting

By CARY FEMRITE  
*Pebble Creek Country Club*

To the Golf Course Manager, the prospect of expansion and construction to the existing facility can be challenging, enlightening, gratifying, exhausting and ultimately fulfilling. It is a task that consumes us.

With proper planning, communication, execution and follow-up, a seemingly scary and hauntingly endless venture can become an exciting, worthwhile and profitable experience. The following article reflects on the important issues I encountered during the 9-hole expansion at Pebble Creek C.C. in 1993.

As Golf Superintendents, our responsibilities include day-to-day activities plus the added duties of being the pivot point in a construction or renovation project. The point being, don't spread yourself too thin! The elements involved here are three-fold: budget allowances, managerial understanding and talented subordinates.

**First**, you have to be a supervisor to the present facility. You are consumed by this and added duties strain your authority, budget and personnel. You must have extra funds to accommodate the needed personnel to work on the new site, not to mention the need for more equipment. Create a contingency fund. Also, ask for added compensation for yourself because you will be three times as busy as you once were!

**Second**, your managers need to understand the added burden to your day-to-day responsibilities. You will have approvals to attend to daily with the contractors on site, those being construction matters, squabbles, change orders, crew performance, architects meetings, periodic payment requests and the proverbial Murphy's Law. Stress the importance of your role in decision-making. The latitude extended

to you is respectful of your skills and saves a lot of time! Activity intensifies towards seeding time. You are constantly looking down the road to make sure the new product does not cost your club money later. In this area attention also should be directed toward who will general the project. Unless you are absolutely certain this is the route to take (financially, administratively, etc.), refrain from being the general unless you are prepared for a myriad of challenges. For this

particular project, we had a general contractor. Our architects, Garrett Gill and his associates, processed partial payments and shared the decision-making responsibilities with me. This arrangement met our goals for administration and decisive planning with the change orders that were made.

Upon their recommendations and an important requirement in construction, record all extra work done by your staff and the contractors. At the completion, these figures can eliminate controversial final payment negotiations.

**Paying particular attention to cut and fill plans** assures your people that grades are matched per plan and that site changes get your input. I can't stress enough the important of site visits by the Architect. The architect's input and support guarantee complete assessments of problem areas. Any questions regarding interpretations of plans and specs can be answered at this time.

**Third**, having experienced and qualified personnel on board to carry the burden while you attend to the construction phase makes your job easier and produces a superior product in the end. Your assistants and foremen can prepare for added delegation and supervisory experience. They

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# Budgeting —

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can relieve you from scheduling duties and become an integral part of on-site consultation. During our construction a waterfall was built in-house. We designed it conceptually and implemented those theories along the way to give us a striking feature to complement the new nine. The crew took pride in the project and shared credit in its success!

As with any project, feasibility studies which include budgeting and planning are essential to the fiscal success of the expansion. Architect selection, design guidelines, feature input and conceptual drawings are imperative to the success of any project, large or small.

**The next area of concern is irrigation.** You'll probably want to stay with your present control and head style or you may consider upgrading your system to accommodate future capital improvements. We went the latter route and upgraded our Toro VT 3 and VT 4 system to Toro Osmac. Personally, this proved to be advantageous to us because the radio control versatility made the grow-in process more efficient. We didn't have to drive onto new seed to program and operate the satellites. This is all done by hand-held radios or from the Central Computer. Your new seed bed remains undisturbed.

The excitement and daily challenges of new construction makes our chosen field more attractive to all who see our work. Keep in mind that the project will come to an end, and we are once again managers of a newly constructed golf facility. At times you will question your sanity and reason for existence. With this in mind, and addressing the heart of this article, I will present unit pricing for a variety of areas in golf course construction. I hope this article was informative, and will help you in planning a future project!

The following is the pertinent data for the 9-hole addition:

Description	Area	Budget Price
Total acreage	47 acres	
Tree clearing/grubbing	2 acres	\$2,450.00/Acre
Topsoil stripped/placed	35,000 CY	1.50/CY
Gen. Exc. includes ponds	130,000 CY	1.25/CY
Fairway Prep & Seed	16 acres	750.00/Acre
Rough Prep & Seed	30 acres	750.00/Acre
Greens Prep & Seed	1.68 acres	3,400.00/Acre
Tees Prep & Seed	1.4 acres	2,500.00/Acre
Collars	.52 acres	3,600.00/Acre
Bunkers	73,000 sq. ft.	.75/sq.ft.
Sod installed	17,000 sq. ft.	1.75/sq.ft.
8' cart paths	6,990 sq. yd.	5.00/sq.yd.
6" x 12" concrete curb	3,310 lin. ft.	4.20/ln.ft.
3' high rock wall	1,135 lin. ft.	33.00/ln.ft.
20 mil pvc liner	11,150 sq. yd.	4.50/sq.yd.

## Irrigation

650 GPM Pre - Fab  
Pump Station .....\$ 45,000.00

Pump House .....	8,500.00
- Gabled roof	
- Sky light	
Wet Well & Slab .....	2,500.00
Electrical .....	4,000.00
Wall to wall water .....	\$225,000.00
- 240 - 670 heads - Fairway & Rough	
- 153 - 650 heads - Greens & Tees	
- 7 Osmac Controllers	
- 486 IBM Central Computer	
Total Project Cost .....	\$900,000.00

# Jack Kolb's Trip —

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clear" areas they do not learn to fly. Thus they never reach the sea and starve to death. Hundreds of thousands of decaying gooney-bird bodies are the result.

Michael Kolb was quoted as saying "It was absolutely fascinating to listen to my dad talk to the other veterans and to see the places where he had been." Michael was told by his father not to expect to find too much or anything in the way of archaeological artifacts of a Polynesian culture (if indeed they did stop there on their way to Hawaii), since the island was racked from one end to the other by bulldozers, by slit trenches, by bombs and by bored occupants in the past who out of sheer delight might have taken the remains of a "stone (artifact) hatchet" and tried to skip it across the lagoon.

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