

10 QUESTIONS

often asked about **course building**

By **GEOFFREY S. CORNISH**

EXCLUDING real estate and clubhouse, the cost of building a golf course is no higher today than 30 years ago. Even with rising labor and material costs a beautiful course of championship length with larger greens and better fairways can be built for about the same figure as could a shorter and inferior course years ago. This is due to the marvels of modern earth-moving equipment and increased knowhow on the part of builders together with better fertilizers, chemicals and grasses.

To build a course without excessive construction costs, however, adequate planning, correct design and modern methods of construction are required. The purpose of this article is to put before clubs, corporations and individuals contemplating construction of a golf course an outline of some of the factors involved by giving answers to ten questions frequently asked. Since conditions and circumstances vary this information is to serve as a guide rather than as an absolute answer. Course building costs certainly can't be given except in a very wide range.

1. Should a layout be planned with any one age group in mind?

Because men past middle age often provide a large part of the financial backing for a club, one hears the argument with increasing frequency that a course should be planned for this group. This, in my opinion, is totally unnecessary.

An architect through devices such as alternate routes from tee to green for different types of players, and length and diversity in tees, can provide pleasurable and fascinating golf for everyone. With a tidal wave of younger golfers who shortly will be looking for clubs to join, it would appear extremely shortsighted for a club to have its course designed for only older members.

Another tendency equally shortsighted is to be detected on fee type courses. While it is a legitimate objective to plan these courses with the intention of getting the

maximum number of rounds over them in crowded periods, there is certainly no need to make a race track out of the course.

Lack of challenge on any golf layout inevitably leads to its downfall and the owner of such a course, although it is crowded today, may find his players moving to more interesting layouts as soon as the opportunity arises.

2. What is the prevailing trend in the use of sand traps?

Years ago a large number of sand traps were considered necessary. This led to distressing playing conditions for the average golfer and excessive maintenance costs. Then the pendulum swung the other way and certain clubs and fee courses removed nearly all their fairway traps. Today a middle-of-the-road trend is apparent. Artificial hazards in moderation, if skillfully placed, are worth extra maintenance costs as a contribution to strategy and a factor in making golf intriguing.

3. How many playing members can a course accommodate?

This is a most variable factor depending about as much on player inclination as on course layout. Still, for planning purposes, a club about to organize needs facts. Many clubs consider that 9 holes can accommodate 125 to 200 and 18 holes 325 to 450 playing members. There are courses comfortably accommodating more than this, but on the other hand there are some that are crowded with even fewer members.

4. How long before the new course can be opened for play?

To maintain member interest and to provide revenue it is necessary for the majority of courses to open as soon as possible after construction is completed. Furthermore, it seems that reasonably early opening (provided it is not too soon) brings putting surfaces into shape quicker because daily maintenance is often neglected when the course is not in play.

A course seeded in September can be opened by the following Memorial Day.

Seeding in March or April permits a September (and in numerous cases a July) opening. As an example, work was started on nine holes of the Dartmouth CC near New Bedford, Mass. in December, 1954. Seeding was completed the following April. The course opened July 2, 1955. Much of the credit for the splendid condition of this club's new greens in a severely bad summer for turf is due to E. J. Maderias Co., the contractors, who did a superb job of fine grading, and to William Ash, supt., who took over areas of seedling grass and developed them in masterly fashion into putting surfaces within a few weeks.

After spring seeding of fairways permanent grasses will provide little cover that summer. Therefore, a large percentage of quick germinating grass such as domestic rye is required in the mixture if summer play is desired. By September the domestic rye will die out and permanent grasses should start to take over.

On seeded greens a very heavy rate of sowing is required with as much as 6-lbs. of bentgrass per 1000 sq. ft. if they are to be brought into play quickly. Newly seeded tees will give out quickly and it may be necessary to place the markers off them for fairly long periods the first season.

5. What is the cost of building a modern golf course?

Costs of a course necessarily vary with its design, lavishness, soil moving and conditioning, water available and several other factors. A deluxe 18 might cost \$250,000 or more including a fairway water system. On the other hand I can name less lavish courses, but still of high quality and championship length, where the cost of 18 without skimpy, make-shift work was around \$90,000 complete with green and tee water system. These figures do not include real estate and clubhouse.

Obviously land has a profound bearing on construction costs. Land where many cuts and fills are required as well as extensive tree clearing, stone and boulder removal and many acres to drain, or where there is inadequate topsoil will be costly to build upon. On the other hand ideal terrain may reduce costs below the figure above.

6. How necessary is a fairway water system?

An analogy has been made between movie houses with and without air conditioning and golf courses with and without fairway water systems. While this comparison is not altogether appropriate, a fairway water system is a desirable asset.

Still, required capital may not be available at time of construction and the club has to be content with a system for greens and tees only. At this time, if a source of water sufficiently great is available, the club might do well to consider installation of a fairway system for a future date and make provisions for main pipes. Later, if more funds become available the larger system can be installed either in toto or on a few holes each year.

7. What is the cost of maintenance equipment and course furnishings?

For the first season, \$4000 to \$7000 at current prices beyond construction costs is necessary to equip the course with minimum maintenance equipment. This is added to each year as the supt. requires additional items. In this regard, Orville Clapper of the Clapper Co., West Newton, Mass. listed in GOLFDOM, October, 1951, a total of \$35,000 worth of maintenance equipment to ideally furnish an 18-hole course. In addition an equipment building must be provided.

8. What type of construction machinery is required?

In early stages of earth-moving the largest equipment that can be rented will move soil for the least cost per cubic yard. Large scrapers, bulldozers, payloaders and power shovels will get the job done quickly and at far less cost than lighter equipment.

As the job proceeds, lighter bulldozers take the place of heavy equipment. Finally, farm or golf course tractors pulling mechanical rakes, small graders and rotary type plows do the finish work.

Only through wise use of modern equipment can value be received for money spent. Before World War II, for example, 100 to 300 men were necessary for construction. Today, mechanical rakes do all raking and finish grading on the fairways, rotary-type plows effectively mix sand and other materials into topsoil on the greens while powered screens and compost shredders handle soil screen operations. Seldom more than 40 men are needed and the labor force is often smaller.

9. By what methods can the work be carried out?

After the architect's plans are drawn up and specifications completed, the work can be let out on a contract basis to a golf course contractor or handled by club personnel. A third method is to let phases of the work out to a general contractor.

All three methods have advantages. It

has been repeatedly demonstrated that constant daily supervision over and above the supervision the architect normally provides is required from an experienced man. By hiring a golf course contractor, the club gets the advantage of his experience and that of his crew. Likewise, when the club handles the work on its own or lets it out to a general contractor it hires an experienced supt. For this purpose the future supt. is the logical man and his presence during construction results in his ideas being incorporated into an installation for which he will be responsible.

10. What costs other than those of construction are to be considered in planning stages?

Frequently clubs in the earliest planning stages set yearly dues with no thought to annual maintenance costs. These costs should be estimated in advance. Perhaps the best way for a new club to obtain the required information is from established clubs of similar quality, taking into account that certain features of older courses were designed for hand maintenance.

Eighteen hole courses, with which I am familiar, cost from \$15,000 to \$50,000 annually to maintain. At the former figure, courses are playable; while the latter represents perfection in grooming. Modern design streamlines the course for efficient power equipment maintenance and more thought is given during construction to the supt.'s future problems. Thus many super de-luxe layouts built today can be maintained for about the same as more modest courses built years ago.

416 Courses Benefit from Regional Turf Service

At the meeting of the 1955 Green Section committee of USGA held at the CC of Virginia, Richmond, Joseph C. Dey, Jr., executive director, reported that there are 404 subscribers to the Regional Turf Service and 416 courses are benefiting from it.

Among suggestions made at the meeting was one by B. P. Robinson advocating establishment by USGA of a seed foundation program to provide pure seed stock to clubs for nurseries and other purposes. It was also suggested that turf development exhibits be arranged at USGA championships such as Southern Golf Assn. has been holding in connection with its amateur championship tournament since 1953. Stronger support for the Regional Turf Service program also was advocated.

PATTY COMPLETES GREAT YEAR



Patty Berg finished her 22nd year of competitive golf and her 15th as a member of the Wilson Pro advisory staff by being top money winner (\$16,492) of women pros in 1955 and winner of the year's Vare trophy for low scoring average, 74.47. Patty's the first woman golfer to lead in purse winning and scoring average for a year. She won six events last year — St. Petersburg Open, Titleholders, Western Open, All-American, World's and Clock Open. With Wm. F. King, Wilson Executive vp (l) and Fred J. Bowman, Wilson pres., Patty appears with trophies she won last year. The trophies and the number of times Patty's won them (l to r): World's (3). All-American (4), Western Open (5), Titleholders (6).

Thanks Superintendents' Wives in New England Bulletin

A graceful job was done by Homer Darling, editor of the Newsletter of the Golf Course Supts. Assn. of New England for the organization's members. The Newsletter, in announcing a party honoring the supts.' wives, thanked the girls, per the following statement:

"The deepest tenderness a woman can show a man, is to help him to do his duty."

Mulock.

"Dear Ladies, God Bless You. Your menfolk in this organization are appreciative of your faithfulness, patience, and encouragement shown them during the past Summer's trials and tribulations.

"They needed your comfort and understanding more than ever when the pressure was the greatest—and you were not found wanting. Many times they were late for dinner, late for supper, and out in the middle of the night with emergencies.

"Maybe you did scold a bit but down in your heart your sympathy was theirs."