

GUIDELINES FOR PLANNING A GOLF COURSE

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So you are planning to build a golf course! The tremendous increased interest in the game of golf is encouraging more and more individuals and groups to build courses to help ease the shortage of golf facilities that exists in many areas throughout the nation.

Development of a successful golf venture requires careful and extensive planning. Land values, costs of construction and maintenance, and the time interval from initiating construction to course completion (usually 12 months or more) are factors that affect the success of any golf project. Not only should one have a properly designed layout with acceptable construction specifications but also a feasible plan for financing and operation. Before taking any definite action, however, one should investigate the feasibility of the entire project for the area concerned.

During recent years I have had the pleasure of working with thousands of golf course planning groups. Based on this experience I shall cite certain basic guide lines that have proved helpful in the development of many successful golf ventures.

Feasibility Study

First determine the economic feasibility of your planned project. Assure yourself that there will be sufficient income to at least pay for the construction and operation costs. If you are planning a daily fee type operation, information on the following items will be of assistance in making your study: population within a 10 mile radius; a 20 mile radius; population increases over the past two decades (nationwide it was about 36%); number of daily fee type golf courses now in operation within the 10 mile and 20 mile radius; have there been any failures in recent years. An acceptable yardstick for daily fee type courses is one 18-hole operation for each 25,000 people.

What are the economic characteristics of the area—the principal type of employment? What is the per capita income in the area? Is it increasing along with regional or national trends? What are the unemployment characteristics?

Planners of private country clubs will want this information too. They will wish to know, in addition: how many country clubs are now in the area; sizes and classes of memberships; existing initiation fees and annual membership dues; are there waiting lists at other clubs; have similar projects failed recently—if so, why? If the results of your feasibility study are favorable, you are now ready to proceed with the next step.

Selection of Site

Survey the area for a suitable site. Among the factors that require careful consideration in the selection of a site for the golf course are: size and shape of the property (50 to 80 acres for a 9-hole regulation length course; 110 to 160 for 18—irregularly shaped plots often afford opportunities for more interesting course design). Gently rolling areas with some trees are preferable. It may be wise to acquire more land than is actually needed for the course. Land adjacent to golf courses frequently has increased value for use for home sites.

Accessibility is important. Unless absolutely unavoidable, a golf course should not be off the beaten track. All other things being equal, design the course so one or two holes parallel the highway—it is good advertising. Soil factors are extremely important. The ideal golf course soil is a sandy loam. The better the stand of turf raised on fairways and greens, the more satisfactory and more popular will be the course. Be sure to take into consideration the character of soil when choosing the site. Soil analysis will be made for you at low cost by state agricultural departments or county agents. Much helpful information can be obtained from state agricultural experiment stations and county agents on proper turf development; proper grass seeding, growing and maintenance.

Electric power, an ample water supply and proper drainage conditions are essential to the successful operation of a golf course. These should be available for the site selected. The amount of clearing necessary will affect construction costs; likewise, a stone removal program can be expensive. A golf course should, if possible, have patches of woodlands as trees offer one of the best natural hazards if properly placed. It is costly, however, to remove large growing trees from those portions of the site which will be fairways in the final plan.

The last consideration in site selection is—does it have natural golf features? Rolling terrain, creek valleys, woodlands, ravines and ponds make the job of designing an interesting golf course much easier. Also—is there sufficient north and south yardage to eliminate holes facing into the sun? The character of the property has a profound influence on the quality of the resulting golf course. If the golf course architect fits his design to the terrain, altering it as little as possible and avoiding all unnecessary earth moving, economy usually will be the result. When you feel you have a suitable site, it is wise to call in a capable golf course architect for an opinion as to the feasibility of the proposed site for a golf course and the estimated construction costs.

Consult Golf Course Architect

No one would consider building an expensive home without consulting a building architect. The services of a competent golf course architect are equally important for the design and construction of acceptable golf courses. No golf course can be properly developed to function as it should unless the designer appreciates the complicated relationship between the course, the mechanics and strategy of the game and the players' psychological reactions. Invariably the very modest increase in cost of proper design and construction will return additional profit within the first few years of operation—in reduced maintenance and repair costs and in better playing conditions.

In selecting the architect assure yourself that he is experienced and that his past performance has demonstrated his ability to properly handle all the problems that may be encountered. Learn what courses he has built, visit some of them to gain firsthand information of his work, then enter into a written agreement to avoid misunderstandings in specifications for the course itself, costs, terms and other details. Naturally costs will vary depending on the amount of clearing, size of the greens and tees and the type of construction.

Most golf course architects are well agreed on what makes the ideal 9-hole course in the matter of distance. Such a course should measure over 3000 yards—preferably around 3200 yards. Authorities also agree that par (arbitrary measure of the difficulty of a hole) for 9 holes should be 35, 36 or 37, with 35 being the most common. Most experts suggest that there be two par-3 holes; two par-5 holes; the remaining five holes to be par-4's.

The well balanced golf course plan is an alternating arrangement for distances of holes in a 4-5-4-3-4-5-4-3-4 order of par to give variety. Limitations in local terrain and property areas may alter this plan to use of other combinations. The first hole should be a relatively easy par-4 hole of around 380 to 400 yards in length, comparatively free of hazards or heavy rough, in order to get the golfers started off on their game as expeditiously as possible.

Par-3 holes range in length from 130 to 250 yards; par-4's—251 to 470 yards and par-5's—471 to 550. Generally speaking, the holes should become increasingly difficult to play as the round proceeds. Fairway width is usually about 60 yards but will vary depending on the type of players expected to play the course and the strategy of the play of the particular hole. Green sizes usually vary from 5000 to 8000 square feet depending on the length of the hole. The shape of a green will depend on the strategy of design, location and size of traps and the length of the shot playing to it. Tees should fit into the terrain, be as wide as possible (minimum width about 30 feet), and long if tournament play is anticipated. As stated previously a qualified golf course architect should have the proper answers for design and construction of a golf course for your specific site.

Prepare Construction Budget

Golf course construction costs vary greatly. Four basic factors which will largely determine the overall cost are the cost of land, the natural assets and liabilities of the site chosen, the labor and equipment costs in the area, and the type of design. Costs will vary widely depending on such items as size and quality of greens and tees, type of construction of the course itself and type of irrigation system used. Construction costs for a 9-hole regulation course (not including land costs) may range anywhere from \$40,000 to \$150,000; for an 18-hole course \$75,000 to \$350,000. Do-it-yourself 9-hole layouts have at times been built for as little as \$25,000 but this is an exception to the general rule.

Before proceeding with a golf venture it is essential that detailed cost estimates on all phases of the project be obtained. Often key items which may increase costs materially are overlooked. The following budget, recently prepared for a mid-Atlantic 18-hole golf project, may serve as a guide:

Land acquisition (200 acres)	\$ 96,000
Topographic map of area	\$ 1,350
Construction of 18-hole course	158,000
Supt. of construction (to be retained by group as golf course supt.)	6,000
Field engineering	1,000
12-acre pond on golf course	2,500
Fairway watering system	50,000
Four rain shelters on golf course	1,000
Well, piping system and four drinking fountains	<u>2,000</u>
TOTAL for golf facility	\$221,850
Golf course architect fees	20,000
Golf course maintenance equipment	20,000
Maintenance equipment shed	4,000
Access road	5,500
Parking area	7,000
Misc. contingencies	<u>10,000</u>
TOTAL budget for project exclusive of clubhouse but including land costs of \$96,000	\$384,350

As noted above, the \$384,350 total does not include a clubhouse, swimming pool or tennis courts—facilities that may be desired if the project is to be a country club. For a daily fee type course the cost of a functional golf shop must be added.

Financing the Project

Five years ago there was practically no financing available for golf course construction. This picture has changed. In recent years some banks, insurance companies and other financial institutions have become interested in golf course financing. Several Federal Government loan programs designed to assist in the development of recreational facilities are now in effect. Among the Federal agencies that have financial assistance programs which may aid in the development of golf courses are the U.S. Department of Agriculture, Department of Commerce, Housing and Home Finance Agency, and the Small Business Administration.

The Department of Agriculture has two loan programs—one for non-profit associations serving farmers and rural residents by direct use or through economic benefits. The interest rate varies but may not exceed 5% and loans may be made up to \$1 million. Maximum term on all loans is 40 years.

A second program is available to individual farmers who may desire to put part of their acreage to uses other than farming, for example, build and operate a profit motive recreational facility (could be a golf course). Maximum loan in this case for facility construction is \$60,000; interest rate 5%; repayment period may not exceed 40 years. Another \$35,000 short term loan may also be available to finance farm or recreation equipment and operating expenses. All Department of Agriculture loan programs are administered by the Farmers Home

Administration. Further information may be obtained from your local county farm agent or the Information Division, Farmers Home Administration, U.S. Department of Agriculture, Washington 25, D.C.

The Small Business Administration continues to approve some loans each month for privately owned profit motive recreation projects, among them—golf courses. The maximum loan here is \$350,000, usually repayable in monthly installments over a 10 year period; interest rate is usually 5 1/2%. SBA prefers that local financial institutions participate in loans whenever possible. It does make direct loans when financing is not available on reasonable terms from local sources. Further information on SBA's program is available from your nearest SBA field office of which there are 59 located in strategic areas throughout the United States.

Cities, counties and states seeking to acquire open space for recreational use may wish to explore the possibility of a loan or outright grant from either the Housing and Home Finance Agency, Urban Renewal Administration, or the Area Redevelopment Administration, U.S. Department of Commerce. Address of the above two offices is Washington 25, D.C.

Adequate financing is of the utmost importance. Golf course maintenance costs are usually higher for a time on newly constructed courses. And if your project is a daily fee type operation it may take a year or two before you have the play you anticipated—your course will have to become established in the area. Assure yourself that you have ample financing to complete the golf course properly and to operate it for a given time.

Course Maintenance Costs

The cost of labor in a given area will have a decided influence on the total golf course maintenance cost as about two thirds of the cost of maintenance usually goes for salaries of the golf course superintendent, foremen and laborers. A study of the operations of 50 country clubs (nationwide sampling) for the year 1962-63 made by a leading accounting firm reveals that maintenance costs per hole averaged \$3,394. Of this, \$2,156 represented cash payrolls. The same study states that maintenance costs per hole have increased from \$2,369 to \$3,394, or 43% during the past ten years.

A survey of 16 private 18-hole golf courses in Westchester County, New York, reveals that maintenance costs averaged \$51,466 for the year 1962. The average labor cost per 18-hole course was \$36,714—this does not include the salary of the golf course superintendent. Averages for other maintenance costs for the year were: supplies \$1,843; repairs and parts \$2,864; gas, oil and grease \$1,612; chemicals \$2,125; fertilizer and lime \$3,830; soil, top dressing \$853; seed \$923; sand for traps \$702.

The Metropolitan Golf Association in its 1961 report on operations of 64 clubs in the greater New York City area gives average maintenance cost as \$3,083 per hole. High was \$4,222 per hole; low was \$1,100 per hole. Approximately 65% of these costs were for wages of the golf course superintendent, foremen and laborers. The average number of men employed during the season was 9.9. High was 26; low 5.

Planning and Operational Aids

Individuals, groups or municipalities planning new golf facilities or desiring suggestions on operational procedures may find the services of the National Golf Foundation (804 Merchandise Mart, Chicago 54, Illinois) helpful. The Foundation—a nonprofit corporation founded in 1936 by the major manufacturers of golf equipment—was organized to meet the need for a national clearing house for information essential to the planning, construction, operation and maintenance of golf courses and to increase public interest in the game. It publishes numerous planning information publications, among them "Planning Information for Private Golf Clubs," "Planning and Building the Golf Course," and "Golf Operators Handbook."

By 1953 the need for more new golf courses in the United States became so critical that the Foundation's sponsors established a field service to directly assist in the development of all types of golf facilities. Today the Foundation maintains four regional field service offices available to any group or individual considering the development of new golf courses. In my capacity as Director of the Eastern region (territory Maine to Florida which includes 17 states and the District of Columbia) I met with over 300 golf course planning groups last year to give assistance on organizational, financing, operational and maintenance problems.

Other national organizations that have services for certain specialized golf course operations are: The United States Golf Association, Green Section, 40 East 38th Street, New York 16, New York; The Golf Course Superintendents Association of America, 224 No. Third Street, Jacksonville Beach, Florida; The Professional Golfers Association of America, Dunedin, Florida, and the Club Managers Association of America, 1028 Connecticut Avenue, Washington 36, D.C.

The Future of Golf

Americans, as a whole, no longer seem to be content to sit on the sidelines and enjoy their leisure as spectators. An increasing number is actively participating in recreational activities and the game of golf, once regarded as only for an exclusive group, has become a favorite pastime enjoyed by individuals at almost all economic levels. There are now over 7,250,000 golfers in the nation. It is estimated that 750,000 individuals became new golfers last year.

There is every indication that golf, now the fastest growing sport in the nation, will continue in this role. The National Federation of State High School Athletic Associations reveals that golf has jumped from 10th to 6th place in popularity among high school students in the United States since 1960. Twenty-six sports were listed. Over 400,000 students are now being introduced to the game annually.

There were 7477 golf courses in play in the United States as of January 1, 1964—673 of them were par-3 type layouts. About 500 new golf courses and/or additions were opened for play throughout the nation in 1963. This includes about 100 par-3's.

Leading states in new golf course development last year were (totals include both regulation length and par-3's): California 41; New York 39; Pennsylvania 32; Florida 31; Ohio 27; Michigan 19; North Carolina 18; Indiana 15; New Jersey 14; Virginia 12.

Total capital investment in golf facilities throughout the nation as of January 1, 1964 is estimated to be \$1,797,000,000. Total annual maintenance costs for the nation's courses approximates \$164,400,000. About \$55,000,000 was spent for new golf course construction during 1963. Total acreage devoted to golf courses throughout the United States is believed to be around 703,700. The National Golf Foundation estimates that more than 126 million rounds of golf were played in 1963 on the nation's courses.

Will there be continued need for more golf courses? On the basis of expected population growth alone it is doubtful that there will ever be sufficient courses to serve the demand. The nation's population today is 190 million; it is expected to be 300 million in 25 years. The ratio of golfers to courses, nationwide, is about 960 per course at present.

More people will have more leisure time whether they want it or not. The 35-hour work week is becoming more prevalent and indications are that a 30-hour work week may be the general rule in the 1970's. And people are living longer. The American Medical Association states that today's children can expect to live at least ten more years than the present average. This increase will be due both to medical advances and to changes in our way of life—proper diet, exercise, rest and recreation.

Family incomes are expected to increase about 20% by 1970. While prices may also be higher, it is anticipated that incomes will increase more than prices—resulting in net increased cash on hand.

Yes, population increases, a shorter work week, increased leisure time and anticipated higher incomes all point to increased participation in golf, the one individual sport that can be enjoyed by persons of almost any age or sex during one's entire lifetime!