

The Golf Course Development Process

Questions & Answers



A PUBLICATION OF THE AMERICAN SOCIETY OF GOLF COURSE ARCHITECTS



The decision to develop a new golf course is serious business. It requires significant time, land, resources — and money. This guide helps explain the process. It provides information on how to determine the financial feasibility of your project, how much and what type of land to use, and various aspects of planning, construction, maintenance and operation. It also provides insight regarding the various professionals who should be involved.

WHO CAN HELP YOU THROUGH THIS PROCESS?

The process of designing and constructing a golf course is complex. Market analysis, site selection, cost estimation, permitting, master planning, detailed design, construction and grow-in must all be understood and coordinated.

Your golf course architect, much like a symphony conductor, blends a variety of disciplines into a worthwhile and cost-effective project. A golf course architect's skills include:

- A thorough knowledge of the game of golf, its history, its players and design strategy
- Expertise with financing and permitting
- Familiarity with heavy construction, agronomy, hydraulic engineering, soil science, civil engineering and geology
- An understanding of which landscape architecture helps create a golf course plan that highlights and preserves the natural environment
- Training and experience in the creation of both a master plan and the detailed routing plans
- Specifications covering all of the phases required to build a golf course
- Handling the bidding process to help select a qualified contractor

Retaining a golf course architect early in the development process will help guide the process in an efficient manner from start to finish.

IS YOUR PROJECT FEASIBLE?

Step one in any golf course development is to determine whether the project should even be pursued. Naturally, development considerations vary greatly depending on whether the proposed golf course is to be public or private. However, there are key elements common to both types of development. Routing studies will help a developer determine how, or even if, the project should proceed.

Three basic studies can be particularly useful:

1. *Market Analysis* — Will the demographics of the area support a new facility? How many of what type of competing facilities exist in the area? What is the history of these facilities?
2. *Feasibility Studies* — What type of facility will your market support? At what price point should green fees be set? How much will it cost to construct and operate the type of facility that should be built? Is the required capital available — and at what interest rate?
3. *Economic Impact* — What degree of tax burden will this type of facility face? Does the area have the workforce available to staff such a facility? What other types of recreational activities are in the area?

HOW DO WE GO ABOUT CHOOSING AN APPROPRIATE SITE?

Choosing the right site can make or break a golf project. The best golf courses throughout the world owe a great deal to their sites — and, of course, how these sites were transformed to create exciting and memorable courses.

It's a matter of viability mixed with appeal — and it is both objective and subjective. Your golf course architect can play an important role in site selection by helping to carefully evaluate alternative sites. And, when a site has already been chosen, a qualified golf course architect is able to provide an assessment of whether the site has the necessary character to create a golf course that will meet the project objectives.

WHAT ARE SOME OF THE KEY ASPECTS IN SITE SELECTION?

- Location, location, location
- Terrain which requires minimal earthmoving
- Suitability for an environmentally sensitive approach to golf course development
- Quality soil suitable for excellent turf grass

WHAT ARE THE PRIMARY QUESTIONS TO ADDRESS FOR A SPECIFIC SITE?

- Property size and configuration — Can a quality golf course routing be achieved within the useable land?
- Suitability to support healthy turf growth through soils, proper drainage and water availability
- Ease and availability of utility connections, including those necessary for a clubhouse and maintenance facility
- Accessibility of the project for construction logistics
- Proximity to population centers and thoroughfares
- Governance, including regulatory restrictions/zoning criteria
- Adjacent land uses / distractions, such as air traffic, noise, etc.

HOW MUCH LAND IS NEEDED?

Every course is different, but an 18-hole regulation-length golf course and practice facility will often require 175 to 250 acres of usable land. This includes an area for a clubhouse, practice putting green and a practice range. The total acreage required depends upon whether the layout is a “core” design (a course entirely within a simple shape) or whether the design moves through residential lots or other development areas.

WHAT TYPE OF LAND IS BEST?

Gently rolling terrain is ideal, while flat terrain is generally better than steep. Land parcels that accommodate “returning nines” are generally better than odd-shaped parcels that limit options. A site should allow for orientation away from the sun when starting, finishing or practicing. Orientation may be driven by the clubhouse site, which ideally allows for panoramic views.

WHAT IF YOUR SITE ANALYSIS DOESN'T SUPPORT YOUR ORIGINAL INTENT?

It is not wise to force any golf course development onto a site which is unable to support the physical or financial requirements identified through a careful analysis. Should your analysis show a market viability for golf, but insufficient space for an 18-hole layout, an alternative facility may be considered. Executive-length courses, 9-hole layouts, par-3 courses, and practice-only facilities are just some examples of alternative golf facilities. For more information, ASGCA has published a book by ASGCA Past President Michael Hurdzan titled, “Building a Practical Golf Facility.” Contact ASGCA for more information.

HOW IS A SITE DEVELOPED TO ITS GREATEST POTENTIAL?

Once a project has been deemed viable, a site is selected and financing is secured, it is time to finalize a team to develop a plan for the site's best use. It's been said that land planning for golf courses is a lot like putting together the pieces of a puzzle — but without the benefit of having a picture on the cover. Without question, your design team is your single greatest asset at this juncture.

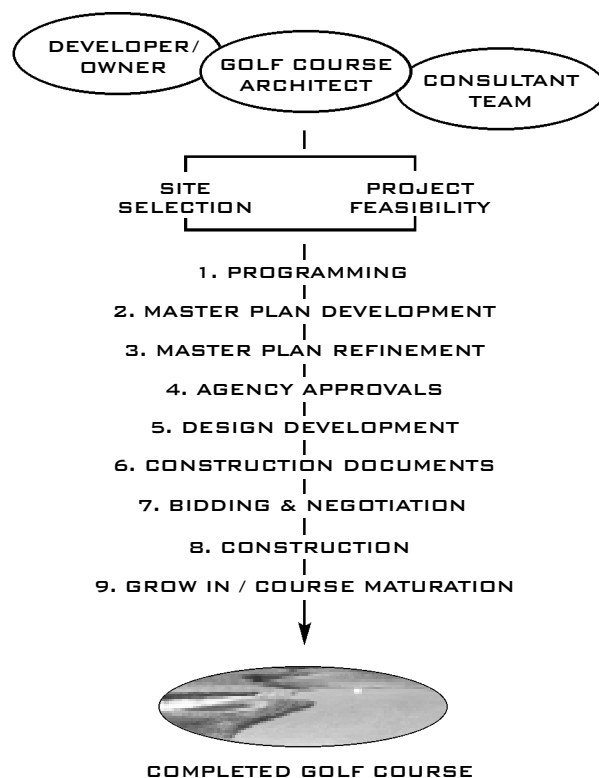
WHO TYPICALLY IS INVOLVED IN “LAND PLANNING?”

Land planning defines virtually every aspect of a golf course project. The decisions made will affect everything — appeal, timing and financial success to maintain the golf course.

In addition to your golf course architect, a design team typically consists of the owner, a site planner, a civil engineer, an irrigation designer, a clubhouse architect and a variety of environmental consultants. This team, under the guidance of the golf course architect, will forge a strategy for development and will reflect the developer's vision for the project. It is the beginning of what we refer to as land planning.

WHAT ARE THE STEPS IN THE DEVELOPMENT PROCESS?

While every project site and development program is unique, the principles and strategies remain constant. The process for developing golf courses begins with the aforementioned studies and ends after the completed golf course is grown-in and turned over to a qualified golf course superintendent.



WHAT IS A TYPICAL DESIGN SEQUENCE?

- *Preliminary Programming* — This initial step identifies the program elements included in the project. Schedules and market data are synthesized with the project objectives. A physical analysis of the site begins.
- *Program Development* — With feasibility studies and market analyses complete, the goals begin taking shape. It should be thought of as a long-term framework to which final plans and specifications will ultimately conform.
- *Conceptual Design* — The team interprets initial data and the golf course architect prepares conceptual plans depicting location of all site elements.
- *Master Plan Refinement* — Based upon conceptual designs, the team refines the master plan, combining economic models, agency submittals, owner objectives and character sketches into a cohesive golf course layout.

HOW DOES THE PROCESS CONTINUE?

- *Agency Approvals* — Submittals are made for governmental approvals. Typically, jurisdictional agencies have been involved throughout the planning process and are aware of decisions that have shaped development of the master plan.
- *Design Development* — Initial development areas are studied in greater detail. Site plan enlargements, elevations and other sketches are prepared to illustrate the critical relationships among the various project components. These studies begin to establish project “character” and “scale” and serve as the prelude to construction documents.
- *Construction Documents* — Upon the approval of design development plans and budgets, final contract documents and specifications are prepared. These documents provide a full description of the project design and are suitable for obtaining competitive construction bids from contractors.
- *Bidding & Negotiation* — Qualified golf course builders, typically those certified by the Golf Course Builders Association of America, are invited to submit bids for construction. In some instances, a developer/owner will work with the golf course architect to identify a single builder with whom to negotiate a contract. In either case, the golf course architect will assist the developer/owner in selecting the best possible builder.
- *Construction* — The project follows a coordinated construction schedule. During construction, the golf course architect will visit the site as necessary to ensure compliance with design intent, and to monitor the quality of construction.
- *Grow-in* — Not to be forgotten, the golf course must be grown-in by a qualified golf course superintendent, typically a member of GCSAA, who will ultimately bring the vision of the golf course architect to life. This takes time and money to ensure the course will be ready to play in an acceptable condition.

Resources:

Free ASGCA Publications:

- **Golf Course Component Life Cycle Chart**
- **The Golf Course Remodeling Process: Q&A**
- **Selecting Your Golf Course Architect: Q&A**
- **The Master Planning Process: Q&A**
- **ASGCA Membership List**
- **Request for Proposal for Golf Course Architectural Services**

Other Books & Publications:

Building a Practical Golf Facility
Michael Hurdzan, ASGCA
ASGCA (2005)

An Environmental Approach to Golf Course Development
Bill Love, ASGCA
ASGCA (1999)

ASGCA Website:

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