The Birth of a Golf Course

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our newborn baby: 10 fingers, 10 toes, everything is in the proper place, all is well, mom is fine. As a parent, those are the words you trust you will spread to family and friends. In bringing forth a baby, how well you prepare and provide for that child while it is in the womb can make the difference. The birth of a golf course, like the prenatal care and delivery of an infant, is an undertaking involving arduous and challenging actions.

Golf course construction challenges both the body and the spirit, just like parenthood. For those of you who have encountered this feat, I am sure you understand. The days (and nights) are long and the hours are even longer. It is a vigorous feat that requires the utmost in your time and talents. Despite all that, a successful golf course construction project can be a personally and professionally rewarding experience.

Golf course construction has three phases. They are planning, construction and grow-in. Each is essential to the success of the others.

The planning phase

The success of most golf course construction projects is often determined during the planning phase. Communication is the backbone of planning phase success. Building an atmosphere of teamwork and common objectivity amongst owner, designer, contractors and staff is fundamental. Each has a role, a professional skill and vision that is anchored on unique strengths. The designer designs, the construction contractor builds that design and the superintendent

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contributes to and administers the design and construction. Developing an open and professional work relationship between team members is important. Understanding the responsibilities, contributions and goals of each team member can eliminate "stepping on toes," promote cooperation and accomplish the owner's objectives, on budget and on time.

Another key ingredient to ensure success during planning is obtaining a thorough evaluation of the site. The "lay of the land" renders the design limitations and characteristics. The topography and soil textural classes are the most influential constituents of the design, grassing, drainage and routing of the golf course. Cost

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estimations of construction materials and techniques are based and developed primarily on the attributes of the site. Grounded (forgive the pun) on these site factors, preliminary construction budgets are established.

Once the owner's goals, budgets and schedules are clear, and the site analysis is complete, a routing plan is chosen. There are numerous factors to consider before choosing a routing plan. These considerations include: major drainage, irrigation, water, grassing schemes, landscaping, car paths, greens construction, design features, regulatory permitting, pump stations, clubhouse and utilities locations, maintenance facility requirements, parking, traffic flow, safety, environmental issues and on, and on.

The single greatest advice I would give someone starting a golf course construction project is hire a highly experienced, competent and qualified superintendent early. The technical expertise a qualified superintendent will bring to a construction project is invaluable. His technical expertise and subject knowledge can ensure the highest quality construction and premium playing conditions, and reduce construction costs. The return on every dollar for compensating the early hiring of a superintendent is perhaps ten-fold the expense. Hire early, hire early and hire early!

After a designer has been selected, a superintendent hired and a golf course routing plan chosen, it is time to write detailed and comprehensive construction specifications and bid documents. Detailed construction specifications, when properly supervised, will prevent inept construction methods and materials from being utilized. The specs will become

holy writ by which all construction is bid and performed.

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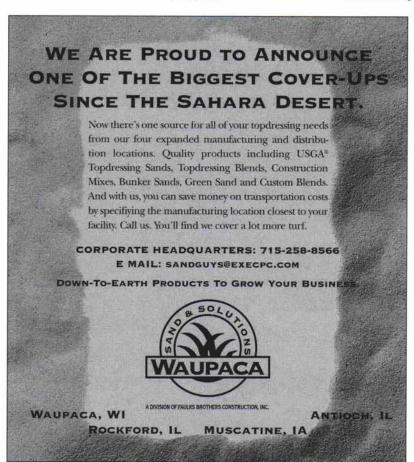
The construction phase

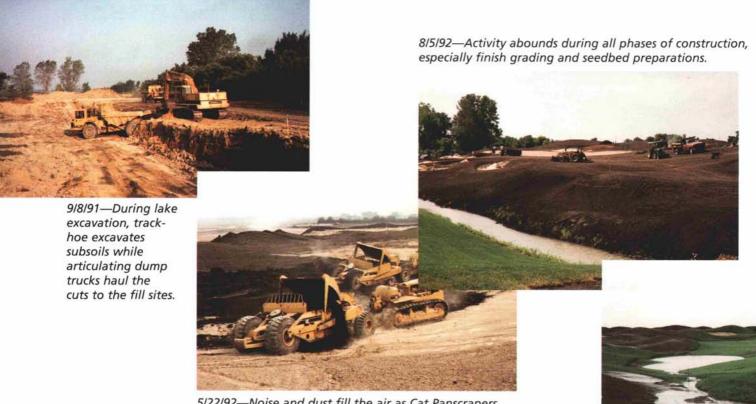
The heart of any golf course construction project is the construction phase. Normally a golf course contractor is selected through a competitive bid process. However, a course can be built by an owner, acting as a general contractor with subcontractors, or even in-house.

During the construction phase, the role of the superintendent changes. Administering the construction contract, being the owner's "eyes" and assuring quality control of construction materials and techniques, add to the growing list of construction phase responsibilities.

When selecting a contractor, consider low "qualified" bid as your best guarantee of construction quality. Low "unqualified" bids often result in poor or faulty construction, substandard playing conditions and greater future repair expense.

Similar to the technical qualifications of the superintendent, a (continued on page 30)





5/22/92—Noise and dust fill the air as Cat Panscrapers respread topsoil.

7/25/93—Lost time, lost materials and washouts remain after 'catastrophic' rains.

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golf course contractor has the technical expertise, experienced personnel and the necessary equipment to perform the job. A good working relationship with a contractor revolves around the contractor's construction superintendent and the field engineer. They are critical personnel in the construction phase. They supervise and coordinate all contracted earthmoving, features construction, drainage and other miscellaneous work as per the owner's request.

The contractor's shapers and operators are infatuating to watch. They are skilled craftsmen. Their ability to interpret a blueline drawing, envision that design and create it in a "natural sense," with a bulldozer, is uncanny.

A construction superintendent has the responsibility to schedule all work, procure all construction materials and provide surety of work as written in the construction bid documents. The field engineer is the mastermind of the project from a construction standpoint. He or she interprets the architectural drawings, surveys, stakes the cut and fills perimeters for all earthmoving operations, and delineates all design control points.

Weather has a monumental role in the timely success and completion of construction. There is no greater sense of helplessness and frustration during construction than to see weeks of hard work wash away during a rain event. The most despised phrase in construction and grow-in is 'catastrophic

rain event.' No matter how substantial or how good your erosion control measures are, nature will be unmerciful and cause delay.

The grow-in phase

Here is where the analogy with a newborn really becomes evident. Like a newborn, the emerging golf course is totally dependent on you for all its needs. It is completely helpless. The care and nurturing that young emergent seedlings require is extensive.

Grow-in starts when all finish grades are achieved, all construction materials, including irrigation, are in place, and construction efforts have moved to new areas. Seeding, sodding, pre-plant fertilization, bed preparations and touch-up tasks are common responsibilities of golf grow-in crews.



8/20/93—Hole #5 (Left Fairway) – Day 14 – Two-week-old seedlings.

At no time can young seedlings go without proper and timely irrigation, nutrition and conditioning. Grow-in accomplishment is governed by how one manages the open end of a hose. Providing water at the right time, in the right amount, at the right frequency is the deciding act.

Developing a well-trained, qualified staff is paramount to a successful grow-in. The specialized watering, nutritional and grooming regimes require enormous amounts of personal attention and expertise. How well you have selected, trained and empowered your staff will pay great dividends and speed the grow-in phase.

It is common to have all three phases of construction going at the

same time during grow-in. The superintendent and his/her staff feel obligated to assist or perform all construction tasks, deemed necessary for the timely and successful completion of the project, that may "fall to the wayside" outside the scope of the contractor's responsibility. The designer is not interested in assisting with the agronomic care and conditioning of grow-in. The same applies to the construction contractor, who is interested in the next earthmoving operation. I believe that this is the most intensely stressful time during construction.

The attention each detail requires is staggering and unrelenting. Every inch of the golf course is different than every other inch, and it must be treated that way. A green with 10-day-old

seedlings is far different than a green with 30-day-old seedlings. How well you manage your time, and the time of others, can make the difference. Here's where "planning your work and working your plan" pays off. Developing your organizational and delegation skills helps motivates subordinates to perform and succeed for you.

At last, grand opening day, and as in childbirth, it is a fitting culmination to all the hard work, time and preparation. So, pass out the cigars—the pride and joy of bringing home a "newborn course" is one you will always remember and cherish.