



Article by Bettina Schrickel (EIGCA)

After the stagnation in the construction of new golf courses in Europe and the British Isles during the past five years, the demand for new golf courses is rising again. The extension of existing golf courses and the development of new golf facilities are options to meet the market demand. During the past two months alone, I carried out three feasibility studies and prepared preliminary master plans as a result in a 200 kilometer radius in central Germany.

Once the feasibility of a new golf course has been clarified, a suitable site has to be found. The availability of an affordable, easily accessible and large enough continuous territory that can either be purchased or leased long-term is often a difficult enterprise, especially in the vicinity of larger cities. However, it is important to select a site carefully because it forms the foundation of the entire development, contributes to the permission process and influences the construction, operation and maintenance budgets.

Average leasing rates per hectare in rural areas are anywhere between 200 – 300 Euro and can rise up to 1,500 Euro in the vicinity of larger cities. A prospective golf course site for an 18-hole development should be at least 65 to 75 hectares large, even though only about half to two thirds of the land is going to be covered with parts of the actual golf course, practice facilities, clubhouse, maintenance facilities and car park. The remaining areas are formed by safety margins in the layout of the individual golf holes, serve as compensation areas and contain ecological habitats that have to be excluded from development.

Aspects that influence the size of a site are shape, layout, geography and geology of the land. The presence of protected ecological habitats, archeological sites, rock outcrops, water bodies and extensive tree coverage increase the demand for a larger site.

The availability of sufficient irrigation water must be guaranteed, otherwise the site is unsuitable for a golf course. Special permits are required should the site be located in a water reserve. Difficult geological conditions

can also restrict the water supply from wells. Irrigation with effluent water or even freshwater creates high construction and maintenance costs, especially in locations with low average rainfall.

An existing infrastructure saves development costs. It is desirable to obtain a site that already includes electricity and freshwater supply as well as sewage disposal. Ideally, a low-traffic access road should already exist near the proposed clubhouse location. If a prospective site access is linked to a major road, unexpected costs may arise for the construction of turning lanes and traffic signals.

Undesirable criteria for a prospective site are noise and smell impairing features in its immediate vicinity, such as sewage treatment plants, livestock farms and major freeways. Hazardous features within a golf course site can be over ground power lines and public foot-and-bridle paths crossing the site. Those should be kept to a minimum or, if existent, get re-routed, if possible. Costs for placing power cables underground are approx. 80

Euros per meter. That means 80,000 Euros per kilometer. It may be better to look for another location, should the site contain a central power line.

A golf course should not be crossed by a major road. Not only do noise and smell impair the quality of the site and the game but large portions of land along each side of the road would have to be set aside for creating safety zones. In addition, significant costs would arise for the construction of tunnels and bridges to cross the road and link both parts of the golf course.



Aspects for the successful selection of a Golf Course Site

The permission process is an extremely important aspect in a golf course project. Planning permission greatly depends on ecological aspects and can make or break the entire enterprise. I have seen golf courses that took 7 and more years to obtain all permits for. To avoid such a time-consuming permission process, various aspects should be taken into consideration for the selection of the site.

Areas with a high potential for golf course sites are former agricultural fields, closed landfills, gravel pits and former mining sites. Due to their low ecological value in comparison to undeveloped stretches of natural landscape, it is relatively easy to obtain planning permission for such sites. The re-establishment of natural conditions in those empty or polluted landscapes through the creation of golf courses is invaluable. Golf courses serve as sanctuaries for birds and other wildlife; they produce oxygen, remove pollutants from the air, filter rain water, prevent erosion, recharge critical groundwater supply, cool the atmosphere and provide crucial green space, which is especially important for urban settings.

Ideally, a golf course site should be gently undulating for playing and aesthetic reasons and to limit construction costs due to smaller amount of necessary earth movement.

Areas that are too flat or too steep have to be modified to provide for decent playing surfaces. That is very costly and depends on special permit regulations for earth movement.

A site that allows a predominating north-south / south-north layout of golf holes provides better playing conditions for the golfer due to the non-blinding position of the sun. Especially in colder climates, it is preferable to place a golf course onto the southern or western slope of a hill. The sun does not only allow golfers to feel more comfortable during play but it can extend the playing season significantly by keeping the site free of snow for much longer than those areas that are exposed to the north and east.

Another important aspect when selecting a golf course site is the condition of the soil because it influences construction and maintenance costs significantly. The ideal soil for a golf course is neither too heavy nor too light. Heavy clay soils log water. Golf courses must therefore be shaped skillfully for maximum surface water drainage. They require plenty of subsurface drainage pipes to dry the course after rainfall in a reasonable amount of time. Another effective but very expensive procedure is to mix large amounts of sand into the top layer of all fairways to

increase the permeability of the soil. Greens and tees must be constructed according to USGA or similar standards. That means that construction costs are generally higher on sites with heavy soil.

Soil that consists entirely of sand on the other hand is not ideal either because it drains the water too quickly without feeding the grass roots sufficiently. As a result, a greater amount of irrigation water and more frequent applications of fertiliser are required to balance the loss. A full irrigation system on greens, tees, fairways and semi-rough is essential to guarantee grass growth and an aesthetic appearance of the golf course. Very light soil requires little or no drainage systems but creates considerably higher maintenance costs in the long term.

An ideal golf course site may be impossible to find but with the above guidelines, it may be easier to find a golf courses site that is charming and feasible: the perfect canvas for creating a beautiful, challenging and sustainable golf course.

Readers are invited to email comments or suggestions for future articles to: lionessgolf@aol.com