Donald Steel believes

golf course construction does

'It does need professional design, construction and the correct specifications'

Current demand and market research may tell us that 700 new courses are needed before the turn of the century, but the nearer that figure comes to being met, it is more important than ever that courses are properly designed and properly constructed. Design and construction are inseparably linked as Fortnum and Mason, eggs and bacon or Morecambe and Wise - each dependent on the other for maximum effect.

In times of plenty, such as currently exist, there is the risk of invasion from inexperienced "cowboy" concerns, a time also when equally inexperienced clients and developers think there is no more to golf course building than turning over a bit of soil, undertaking some rudimentary shaping and throwing down a bit of seed. For this purpose, they may call in the professional from down the road, the first motorway contractor they can find in Yellow Pages, and quite likely fall into the additional trap of thinking that the overall recipe for success lies in buying a well known star name to tell the world how good it all is.

They are people who always take their toothache to the dentist, their legal problems to a solicitor and their tax demands to an accountant. Quite why therefore they feel at home in "deep waters" or why players of all vintages consider themselves qualified to air their views on architecture as well as greenkeeping, has never been adequately answered. However, it makes it more than ever vital to employ only those capable of giving the correct advice - advice based on proper grounding. After all, it is as easy to do things right as wrong; and it is certainly cheaper.

If Bernard Darwin, who took such an interest in golf course architecture, used to preface any remarks on the subject by claiming them to be "unqualified", it should be seen as a lesson to others. It is a pity that most editors nowadays think that the only item of public interest is a recital of money winnings, but the principles of sound golf course architecture haven't changed all that much. The sad thing is that many architects choose to ignore them in the unenlightened search for something more gimmicky, more trendy.

The greatest qualifications for an architect are a rich imagination, an eye for land, a familiarity with as many courses as possible and a retentive mind that stores up good points and rejects the bad. Building slapdash imitations of famous holes is seldom successful but, whilst welcoming the occasional heroic or all-or-nothing hole, there is probably less emphasis on punishing a bad shot directly than ultimately ensuring that it brings its punishment in the subsequent play to the hole.

Good architects do not come down on the bad player like a ton of bricks but pose a series of options whereby the main onus falls on those players best equipped to cope. Back in 1961, Henry Longhurst said that "a player who can only hit the ball 150 yards doesn't need to find it in a sandpit to make the game difficult. It is difficult enough as it is". Yet perhaps the biggest danger of the next ten years is that American architects will spend millions of pounds filling Europe with courses that are unplayable for 90% of golfers.

There is a ridiculous notion that every course must be of championship standard but, in addition to making the best of the land available (within the budget available), the prime responsibility of a golf course architect is to combine challenge and pleasure to all - the significant words being "pleasure" and "all". Losing dozens of balls in numerous lakes while attempting shots with impossible carries is not everybody's idea of fun.

Professional golfers seem to find it hard to put themselves in the spiked shoes of ordinary golfers but Alister Mackenzie's opening sentence in his book Golf Architecture stated that "economy in course construction consists in obtaining the best possible results at the minimum of cost". That cannot mean spending millions to make the best course although every architect needs enough money; and enough is far more than it used to be. So what is the sequence of events most likely to give the best results? Firstly, the proper guidance and advice from official bodies such as The English Golf Union. Their Golf Development Committee (operating regionally) will offer an initial visit but their message to those clients and developers who have not made direct contact with a reputable architect is to guide them on just those lines.

They recommend members of the British Association of Golf Course Architects, a body set up in 1971 to safeguard the public against "unskilled labour". They then tackle each project stage by stage. This starts with a feasibility study - discussing the potential of the land, the technical problems that may have to be overcome and an estimate of cost. After planning permission is granted, the architect is responsible for drawing up the specification of works, drafting whatever necessary working scale drawings and handling the tender documents. Choice of contractors is every bit as important as the choice of architect and the tender list should be based on those with honest reputations, impressive track records and skilled foremen. The architect may be the controller of the contract but he is powerless without the correct interpretation of his wishes, a high level of co-operation and understanding, and a strong respect for each other. It is, in every sense, a team undertaking, the reason for recommending members of the British Association of Golf Course Constructors who keep a close hold on the standards expected of their members.

The most worthwhile understanding comes from regular supervisory visits during construction and a policy that is not too rigid. Adjustments can easily be
made as you go along but it should be perfectly possible for architects to have the vision to get everything right first time. It is a definite sign of weakness to be forever making changes, although it would surprise many the extent of the changes to which architects commanding the highest fees sometimes resort. It is often said (with truth) that an architect is only as good as his specification and here the most crucial facet is in specifying the correct materials. Good materials are always good, bad materials always bad until such time as they are replaced - at a cost.

This is not the moment to divulge trade secrets but the foundations of a green require the same attention to detail as the foundations of a building except that greens based on bottomless seaside sand need no auxiliary drainage; and they are a joy to shape.

It bears constant repetition that drainage is the main problem on greens all over the world and that any impermeable layers will impede the passage of water. This can limit the powers of only greens are to be encouraged in Europe. For one thing, some sands are far from ideal and, for another, the maintenance costs and risks of disease are far greater.

Much is being made of courses in Britain costing £3-4 million, although much of this sum goes in the costly preparation of what the Americans call "moving dirt". Many American architects have never been able to accept the contours as they find them and hence indulge in extensive earthmoving practises which invariably make the natural look artificial and may upset the drainage. I have stressed earlier that sufficient funds are essential and I acknowledge that limited, fairly local earthmoving can be distinctly beneficial, but spending twice as much doesn't necessarily make new golf courses twice as good.

It is somewhat ironic that, as Europe introduces more courses built on American lines, there are signs that America is turning its back on them. They recognise that a return to what one might term traditional courses better embodies the spirit of the game. A couple of years ago, a leading American administrator, referring to recent golf course developments, said "what's happening in my country is insane". Britain has the architects and contractors to build the best courses with much less song and dance than those from overseas and, in keeping with the tradition of Alister Mackenzie, much more economically, although they could, if asked, spend £3 million as well as the next man. However 700 new courses will not be built if they cost £3 million and, if they do cost £3 million, you will price out of the market all those whom you want to attract. Golf is popular in Britain because it has always been within the pocket of the average man and woman; and that has only been the case because our courses have been comparatively inexpensively built.

True, some have been too cheap and we are learning that lesson, but we have not learned all the lessons. It is an undeniable fact that, in the present buoyant market, there aren't enough expert architects, contractors and greenkeepers to go round in spite of moves afoot to increase their education. Nevertheless, that is no excuse for defying logic and ignoring common sense by employing those with none of the right credentials. You wouldn't dream of engaging a butcher to render a heart transplant.

The root zone mix must be uniform

The use of special plant and good materials are essential

recovery after heavy rain or set up conditions of compaction which may not be able to be tackled satisfactorily. Compaction can be caused by the traffic of contractors, another reason for employing those who insist on the prescribed working disciplines.

It is imperative that the rootzone mix is absolutely uniform (however it is composed) if roots are to penetrate their full depth, but that is not to say that sand...