Will the sand only greens at Canvey Island take 40,000 rounds a year... asks John Campbell

Essex's 18-hole public golf course built 3 years ago for Castle Point District Council is steadily maturing and proving to be a popular venue for local golf enthusiasts and visitors to that part of the Thames estuary. The course has been laid out on a flat expanse of open land on the edge of Benfleet Creek not far from Southend-on-Sea. The site chosen is reminiscent of an exposed links land course where the bracing atmosphere and ferocity of the elements can combine to play a major role in the golfing strategy. The course is managed on behalf of the local authority by Golf Landscapes Ltd., Brentwood, Essex, who designed and built the layout at Waterside Farm on the north fringe of Canvey Island.

Golf Landscapes extensive experience in the recreation and golf course construction industry makes them specially qualified to cope with a growing demand to undertake course maintenance contract work as a follow up to their design and construction activities. They have their own contract maintenance division which seems to be kept fairly busy with a large volume of work.

Looking over the course quite recently I thought it was in quite good condition and a credit to Ray Mitchell, head greenkeeper and his staff of 3 men. He was telling me how he graduated from looking after cricket wickets and bowling greens to his present job and he waxed enthusiastically and knowledgeably about many aspects of greenkeeping. He also seemed to have a good rapporte with his boss, Peter Dunning, Golf Landscapes, director.

To create a public golf course of sufficient interest for all kinds of golfers out of a dead flat piece of land is not a simple task unless unlimited financial resources are on hand for extensive earthmoving and landscaping operations. But it is surprising what can be done even on a modest budget when an experienced company like Golf Landscapes is engaged to undertake the work with all their know-how and expertise of building championship courses in this country and abroad.

There is always controversy as to whether a course should be designed for the low or high handicap player, or the short or long hitter. In actual fact a good public course should be designed for all to play and derive pleasure and that is exactly what has been done at Canvey Island. The golf course there provides a fair and enjoyable test without being too long - 6153 yards, par 71. The greens are of good average size with minimal surface 'contours. Tees, bunkers and other features have been subtly landscaped for ease of maintenance and economical upkeep. Large tees are a good feature at every hole to spread the wear and tear which every public course has to accept and take in its stride.

Ray Mitchell said, "The course was constructed before I came here but I think it is important to have the head greenkeeper on the site right from the beginning to follow through every stage of the work progress. If there are problems he will want to be aware of them for he knows that it will be his responsibility to bring the course to maturity so he will want to be satisfied that the work gets done properly."

"The local authority has planted some trees gorse and broom on the course to add a bit of colour and break up the open aspect of the landscape. Most of this has been done in a haphazard and regimented fashion without consideration for the strategic value this could add to play. However, due to a shortage of labour they could not complete this and we were asked to continue the planting programme, so we have tried to do this with a little more imagination and careful forethought to create more interest for golfers at the same time facilitating easier maintenance. Trees in long rows look unnatural and too artificial on the golf scene - so we have tried to plant everything as nature would have it. In small copses and natural groupings to beautify the landscape and improve the character of the course."

"As you can see all our greens are in healthy shape and they survived the long period of drought last summer in reasonable condition for which I am quite pleased. They are sand-only greens sown with a bent/fescue mixture - there has been some poa annua invasion here and there but I do not believe one can avoid that. The greens putt smoothly and are always firm and puttable, especially on those greens closed and are expected to take quite a lot of play - it probably works out in the region of 40,000 rounds a year and numbers are steadily increasing as the course becomes more popular."

"Each green is treated on an individual basis due to the fact that the sand depth varies on some and occasionally fescue die-back occurs during the season. Verti-cutting is carried out with care particularly on those greens where the sand depth is shallow. Raising the blades slightly on certain ones helps to eliminate any unnecessary surface damage in thin, weak growth
areas. It is really quite remarkable how deep grass roots will go down in the sand, in some cases we have come across root penetration down to 7 inches depth. Variations in sand depth certainly show up on the surface by the density of growth - all this has an effect on the speed of the green."

"Another necessity with sand-only greens", said Ray, "is reliable irrigation equipment for you cannot afford to be without water too long when the weather begins to get hot. We have a computerised system of pop-ups which seems to function quite well. It was really put to the test during the drought last year, we had some minor hiccups but came through with flying colours. Make no mistake sand-only greens can dry out very rapidly and it requires constant vigilance through the summer to keep abreast of water requirements."

"My policy with nitrogen applications during the growing season has always been little and often to counteract the effects of rapid leaching in the sand. As a rule this means a light fertilizer dressing of iron sulphate every 3/4 weeks, to maintain a reasonable amount of colour and vigour through the summer. More frequent feeding called for by the needs of the hungry sand can be a source of encouragement to annual meadow grass so one has to be careful with the amount of fertiliser used. It's all a matter of knowing your own greens and being able to discern when vigour is tailing off sufficiently to require more nitrogen."

Some American superintendents I have talked to are very critical of sand-only greens and say they need more 'baby-sitting' or nursing, particularly during the summer months to ensure uniform water distribution for continued replenishment of the small water reserve held by the sand. Lower microbial activity - sand-only greens are likely to be less active microbiologically than mixtures containing soil and there is a much slower response to growth in the spring. A lack of moisture reservoir in sand-only greens is a serious concern. Irrigation systems advanced as they are, still leave much to be desired. In a 3 to 5 mph breeze there is literally no margin for error. Excessive moisture infiltration rates emphasise the need for an efficient under-drainage system. Rapid nutrient leaching is another factor in sand-only greens that calls for higher nutrient levels. Is building greens that require more nitrogen and high volumes of water a move in the right direction? There has been much discussion on the pros and cons of sand-only greens and I do not believe this method of green construction is likely to find much favour among discerning greenkeepers in this country - they are more suited to warmer climes of the USA.