

Tiptoeing among the fynbos

Environmentally responsible development at Langebaan Country Estate

The 450 hectare Langebaan Country Estate is still very much an unfolding story, with many phases and projects yet to be unveiled. This Estate falls within the West Coast Biosphere Reserve, an international designation awarded by UNESCO to promote a balanced relationship between humans and the natural environment. Craig Scott, CEO of Langebaan Country Estate Joint Venture, feels very strongly indeed about protecting the very special local environment. He explains some of the lengths he has gone to in order to achieve just this.

In terms of environmental restrictions around the installation of services, we were unbelievably strict. When putting in the roads, I only allowed a leeway of 1.5 m either side of the actual road to be disturbed, which is very tight. Traditionally, people bulldoze a much wider swathe or even the entire site. It is all about protecting the environment around the roads and sewers that are being installed.

When we designed the golf course [an 18-hole championship golf course designed by Gary Player's Black Knight Design Company] we also had a whole lot of criteria. We redesigned it to be able to utilise all the treated effluent from the sewage treatment plant ourselves, and replaced all the greens so that they would be tolerant of this treated effluent. The challenge here is that the treated effluent is nutrient-rich, and the natural fynbos does not like nutrients at all - it thrives in a very deprived soil. So we had to contain the spray of the golf course irrigation system, so that it did not go onto the fynbos.

We constructed berms on the downwind side to make sure that no spray flowed over. Wherever the fairway ran perpendicular to the prevailing winds, we put in three rows of irrigation so that we could close down those that were downwind so that the spray wouldn't go into the fynbos. Obviously a huge amount of effort went into where and how we positioned the sprinklers so that they didn't spray anywhere other than just on the course.

From an engineering point of view it is very challenging to protect the natural environment. For example, it becomes a challenge when digging your trenches for services to not end up disturbing excessive amounts of natural fynbos. You need to go wide enough to get the pipes in, but at a certain depth, if your trenches are too narrow it becomes a health and safety risk for people having to work in the trenches. I set very strict criteria as to what reserve the Contractors could disturb. The only time they were allowed to override those criteria was if it was a health and safety risk. At the end of the day the Contractors and Engineers did an incredible job in observing the very strict restrictions that both I and the Environmental Officer placed on them.

Most civils companies will just go and clear the whole site and then replant afterwards.

In terms of Department of Environmental Affairs and Development Planning (DEA&DP) approval you have to employ an independent Environmental Control Officer who monitors your compliance with your environmental conditions. I appointed Mark Duckitt of Cape Lowland Environmental Services, who was instrumental in setting up the West Coast Biosphere Reserve. People thought we were mad, because he was regarded as almost 'anti-development'. We set up an independent environmental advisory committee that brought in all sorts of environmental experts from the West Coast region, who sat once a month and were able to issue site instructions to change things on site. Our instruction to Duckitt was that we were going to comply with all the conditions issued by DEA&DP, of which there were 18 pages. I don't think any other developer has done better as far as putting in such a complex set of services with so little impact on the environment goes.

The West Coast is an unbelievably sensitive environment. Here, damage takes decades to recover. Parts haven't been farmed for over 20 years, but those areas haven't yet come close to recovering. On the West Coast the beauty of the natural environment is something that grows on you. It is vast and expensive but often the beauty is in the small things, it is in the detail, and the flower season is truly spectacular.

According to the experts that we got in to evaluate the area prior to commencing with the development, we have on Langebaan Country Estate some of the best natural fynbos that is left in the whole greater Langebaan area - and there isn't a lot left. I am doing my best to try and preserve it.

Every time we build a house, we rehabilitate that entire site. This cost is built in as part of the construction costs. We have a landscape guideline document which is really comprehensive, with a plant list approved by Kirstenbosch Botanical Gardens - and you can only plant from that. Every single home that is built - the footprint that we disturb, we go and rehabilitate the entire area off that list, and it is all waterwise, all indigenous and mostly endemic. It is expensive, and it is a long process - but gardens that are 3 or 4 years old are starting to show a return and to look great. It is worth it.

We don't put gutters in on the houses - wherever we can - otherwise you are gathering the rainwater. In an environment like this it is quite difficult to deal with once it starts running, and it erodes the natural environment quickly. We try to get the rainwater to disperse naturally off the entire roof and back into the veld in a natural way. That is a design philosophy we brought into all of the houses.

We are very strict on the environmental stuff, I must say. It all has to be geared to the specifics of your environment. Usually one would also look at installing grey water systems - using water from the baths,

washing machine, etc. - but again, here this is too nutrient-rich for the fynbos. So in this environment it doesn't work. Here, if you want to water your garden you must use the potable water - which doesn't seem like the right thing to do, but here, it is!

To find out more about Langebaan Country Estate, visit www.langebaanestate.co.za