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Landscape Architects

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Sunrise Village
Landscape Guidelines

1.0 Natural ecological components

1.1 Vegetation

The site is situated on one of the very few remaining areas of South West Coast type Renosterveld, which is distinct from other types in that it grows on fine silts and clays, whereas fynbos is normally found on acid sandy soils. In the Stanford region the higher than average rainfall results in a renosterveld mix with fynbos of the Asteraceous type with a higher grass cover and is co-dominated by 'gombos', 'sewejaartjies', 'pop rosies' and renosterbos.

The only indigenous trees or shrubs (which can be developed into trees by pruning) occurring along the ravines and areas with high water tables are:

Acacia karoo	- Sweet Thorn
Kiggelaria africana	- Wild Peach
Olea africana	- Wild Olive tree
Rhus lucida	- Karee Boom
Sideroxylon inerme	- Milkwood

1.2 Climate

The prevailing winds are the warm summer south-eastern trade winds down the valley and the cold winter south westerly winds produced by the usually rain bearing cold fronts.

Rainfall ranges between 400-500mm/year and falls from May to October.

1.3 Soils

The topsoil is shallow, approximately 100mm thick, and forms part of the hill-wash with a depth of 300mm, consisting of a silty gravely sand. The pebble-marker below is a 100-300mm thick horizon of shale fragments and quartzite gravel. These two layers are permeable and a fair to good growing medium. The reworked residual shale below is 0,7 – 1,5mm thick and is a stiff to very stiff fissured sandy silt-clay, which is not permeable. When planting new trees this layer can cause ponding of water in the tree holes and will result in trees drowning. The residual shale below varies in thickness between 0,4m and 1,2m and is more silty to highly weathered very soft rock shale which is more permeable than the reworked layer. The bedrock is very soft rock shale of the Bokkeveld group of the super group and is weathered thinly bedded weakly laminated shale, which is permeable between the laminations.

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1.4 Water

The steep slopes of the Sunrise Village Development border on the Klein River which flows into the Klein River Lagoon. During the winter the water rises in the lagoon and pushes back the river to the site where it can be utilised as a recreation facility. By constructing a weir it could be a permanent water body throughout the year.

The groundwater from the Bredasdorp beds is generally good except for the calcareous nature of the water-bearing formations, which imparts a high degree of hardness to the water. The pH of the water is +/- 7,0 but the limestone (CaCo3) content in the water can over a long period of time increase the pH of the soil.

2.0 Landscape Concept

The name of the development indicates the theme, which is to be created – 'Sunrise Village'; a village nestled on the Klein River's southern embankment orientated to the north with a spectacular view onto the northern mountain range.

The erven are situated around streams, which are tributaries flowing into the Klein River, and fed by leivore, which collect the storm water off the development. These water features have been created in the Private Open Spaces & road reserves by circulating water from naturally shaped holding dams in the low lying areas near the river whence the water is pumped up to the highest points to then flows along and down rapids, streams, holding ponds and over weirs back into the dam.

Walkways meander along the watercourses to link the properties with a walking trail along the Klein river. The Private Open Spaces are to be restored with indigenous river flora typical to the region and the road verges with *Cynodon dactylon (*Blou kweek) veldgrass, which has been manicured to a lawn. Indigenous trees lining the internal roads and tree clusters at road junctions and intersections create focal nodes.

3.0 Hard landscaping elements

3.1 Boundary screening and fencing:

To create green corridors and maximise the communal open space of the erven; street frontage walls or wooden fencing where required are to be set back at least 2.5 meters onto the properties from the boundary line. These walls or wooden fences may not be higher than 1.2m off finished surrounding ground level.

Boundary screening/fencing, if required, which borders onto the Private Open Spaces has to be visually permeable and make use of olive green coloured wire mesh no higher than 1.8m, to avoid these Private Open Spaces being reduced to narrow corridors.

These Private Open Spaces should be visually incorporated into the adjoining erven gardens. Solid 1.8m high screening will only be allowed between the furthest ends of the neighbouring dwellings to create privacy and to screen the service/drying yards.
Fencing or screening materials to be used are:

- Plastered brick or block walls with rounded plaster tops.
- Wooden lattice, picket or plank-strip fences, treated with tanalith or painted soft natural colours to match specified architecture colour tones.
- Stone pitched, clad or dry pack with natural stone.

Gates are to be constructed from wood, cross bracketed and visually permeable. Where pets are to be contained, olive green coloured wire meshes can be fixed. All kitchen and services yards are to be screened off with a 1.8m high solid screen, wood or brick walling.

3.2 Driveways:

Driveway entrances off the streets be constructed with clay bricks, 100mm x 100mm pigmented cement cobbles or exposed aggregate (brown) concrete pavers or a combination thereof. Light brown or corn colour shades of paving material should be used to match the brick paved areas in the circulation roads.

3.3 Materials:

Natural materials should be used as hard landscaping elements as far as possible, including: Treated wood, wooden railway sleepers, wooden latte, stone pitching or cladding, clay brick or tile paving, laterite gravel surfacing etc. Exposed aggregate (brown) concrete pavers will be accepted.

4.0 Plantmaterial

All plant material to be used must be as far as possible indigenous to the area. As stated above, the development is situated in Renosterveld on Table Mountain limestone with a clay loam soil cover, separated from the geological formation by a pebble layer. The soils are not very permeable and with the prevailing salt laden winds, the planting palette is reduced.

4.1 Recommended plant material:

The following recommended plant list of trees, shrubs will thrive in these conditions, require little water & minimal maintenance

i) Locally indigenous plant species:

Amellus tenuifolius
Carpobrotus edulis
Chaetobromus scraderi
Eriocephalis africana
Leysera gnaphaloides
Mesum crystal
Oncosiphon suffruticosum
Tetragonia fruticosa

ii) Other indigenous plant species recommended for the intensive landscape area:

Agapanthus africana
Carissa macrocarpa
Clivia miniata var miniata
Coleonema pulchellum
Hypericum revolutum
Mackaya bella
Plumbago capensis
Tecoma capensis

iii) Waterplants – for ponds:

Cyperus textiles nana
Zantedeschia aethiopica
Frogmouths sp.

4.1 Trees:

Large Trees:

Acacia galpini	Monkey Thorn
Acacia xanthophloea	Fever Tree
Breonadia salicina	Mingerhout
Celtis africana	White Stinkwood
Combretum erythrophyllum	River Bushwillow
Ficus natalensis	Wild Fig Tree
Ficus rubignosa	Wild Fig Tree
Harpephyllum caffrum	Wild Plum
Khaya anthotheca	East African Mahogany
Kiggelaria africana	Wild Peach
Podocarpus falcatus	Outeniqua Yellowwood
Rauvolfia caffra	Quinine tree
Trichilia emetica	Natal Mahogany

Medium Foreground Trees:

Acacia karoo	Sweet Thorn
Brachylaena discolor	Wild Silver Oak
Erythrina caffra	Coral Tree
Dais continifolia	Pompon Tree
Diospyros mespiliformis	Jakkals Bessie
Diospyros whyteana	Bladder nut (for use in shade)
Grewia occidentialis	Cross berry
Olea africana	Wild Olive

4.2 Shrubs:

Small, low screen and colour (indigenous):

Buddleja salvifolia	Sagewood
Carissa macrocarpa	Num-Num
Nuxia floribunda	Forest Elder
Polygala myrtifolia	September Bush
Rhamnus prinoides	Dogwood
Tarchonanthus camphoratus	Camphor Bush

4.3 Lawns

Cynodon dactylon (Blou Kweek) or [1]*Stenotaphrum secundatum*[2] (Buffalo lawn) may be used to establish lawns. No Kikuyu lawn may be planted

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5.0 Irrigation

A drip irrigation system is recommended for the irrigation of the trees along the entrance road and the development boundaries, due to the following:

- There is less chance of over watering occurring and the precipitation rate is less than that of overhead sprinklers, which may become a problem if the rate of water application exceeds the soil's ability to absorb the water. This may happen with the existing soil conditions.
- The wind cannot influence a drip system, as it does with overhead sprinklers. Over-spray of sprinklers will damage tree-watering basins causing surface storm-water flowing into the tree holes, which could saturate the soil and damage trees.
- A drip system requires less water pressure to operate and with the new self-compensating drippers pipe diameters and pressures are reduced. This translates into financial savings.

6.0 Soil nutritional improvement

Soil improvement for the indigenous plant species will consist mostly of the addition of organic matter, such as compost, well-rotted manure and bone meal mixed into the topsoil. Where trees are planted, sand should be added to improve the drainage.

7.0 Conclusion

When one considers the prevailing conditions and ecological constraints of the site, including a shallow topsoil, impermeable sub base, challenging weather conditions and the availability of irrigation water in future, the correct approach is to establish an indigenous landscape. In the long term it will require less maintenance and water. Reclaiming the Renosterveld will set a precedent for any new development in the area.

The guidelines are in place to steer the development towards a cohesive aesthetic and landscape which blends in well with the surrounding landscape. Continuity in design and feel will make for a considerably more attractive living environment than a pastiche of different styles borrowed from all over the world. It is important for the homeowners to follow the Landscape Guidelines to achieve a unified approach and aesthetic, creating the Village aesthetic that we are seeking to establish.