Landscape

Design Principles & Guidelines

for

Eden Island

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prepared by

Steyn Swanepoel
Pr. LArch, Pr. Arch

SSLAD Steyn Swanepoel LANDSCAPE ARCHITECTURAL DESIGN

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1. Purpose of the document

The purpose of this document is:

- to describe the intent and rationale of specific landscape elements on Eden Island;
- to provide implicit and explicit guidelines for development and maintenance of the landscape on Eden Island.

2. Vision for the Landscape

The landscape character of Eden Island aims to emulate the flora on Mahé Island, with emphasis on an informal tropical forest look and ambiance – consisting of dense tropical and equatorial plants. The vegetation and landscape design should enhance the leisurely and carefree Eden Island lifestyle vibrant with life, colour and beauty.







3. Flora

The Seychelles flora can be classified in three groups:

- Endemic plants - which are few in number,
- Indigenous plant species which made their way here through migratory birds or were washed ashore,
- Exotic plants introduced more recently for commercial or aesthetic reasons.

Plants from all three groups are selected, taking into consideration the specific preferences and prerequisites for Eden Island to establish a lush landscape on a sustainable basis.



4. Design principles

4.1 Climate

The Seychelles boasts an equatorial tropical climate influenced by winter and summer monsoons. Shade is essential in this hot climate, not only for humans but for most plants, which thrive under dappled shade; hence trees and large shrubs are planted liberally.

4.2 Salt-laden sea-spray

The fringes of the island are planted with species that have adapted to survive the onslaught of the salt-laden sea-spray, the South East winds during the winter monsoon and the North West winds during the summer monsoon.



4.3 Soil conditions

Eden Island is reclaimed from a coral reef and all soil for planting had to be imported from the main island of Mahé. Although the imported soil was mixed with manure, it is essential that the establishment of a healthy eco-soil-system is supported and encouraged over the long term by regular applications of manure & compost. This will help support a healthy micro-flora and structure of the soil. Earth worms will be introduced in the compost manufactured from the garden litter. Mulching is essential in speeding up this process and retaining moisture in the dry months. Coconut husks (not readily available) are used as an initial mulch material and should be followed by leaf mulch from established plants and trees.







4.4 Fauna

The introduced plant species should over the medium to long term create sufficient diversity for the establishment of a micro- ecosystem supportive of indigenous fauna on Eden Island.

4.5 Fruit trees

Fruit trees form an essential part of the overall landscape, appropriate to the lush and abundant tropical environment. These trees are planted so as to be readily accessible to home owners (e.g. around the stairs and walk ways of apartments). Available space for root systems and orientation of the buildings and gardens dictated the choice of species in each instance.



4.6 Privacy and screening

Selected trees and shrubs are used as privacy screens in the form of informal hedges.





Screening on 1st floor level is as important as on ground floor level





In apartment courtyards where timber lattice screens are provided, climbers are planted.



4.7 Plant development and maturation

The vegetation will go through different stages of maturation. This may affect the views from dwellings. Small palms and trees, for example, will grow taller and may at some stage obscure views, requiring regular pruning (depending on the individual home owners' preference). Eventually these palms and trees will grow into very tall trees with the mature stems affording unobstructed views.

4.8 Apartment, Maison & Villa Courtyards

4.8.1 Apartment Courtyards

4.8.1.1 Trees

Palm and other tree species were planted for visual screening and privacy and to create the impression of entering through a forest. All tree species were selected for their non- aggressive root systems.





The views from above are as important as from ground level.







4.8.1.2 *Hard landscaping*

Aggregate was chosen as the best material to absorb the impact of rain water from the roofs, and for its tidy appearance over the long term. Light levels are too low for lawn, and an appropriate ground-cover plant species that will survive these conditions as well as pedestrian traffic has not yet been identified.



4.8.2 Maison Courtyards

4.8.2.1 *Groundcover*

Lawn planting in the small 'court yards' of the Maisons is not desirable due to the small size which will make Maintenance difficult, and low light conditions: In future most of these court yards will be shady areas. A groundcover for the present with brighter light conditions will have to be replaced in time with a groundcover suitable for shady conditions.

4.8.3 Villa Courtyards

4.8.3.1 *Trees, shrubs & groundcovers*

Planting for the Villa courtyards are selected due to orientation & appropriateness.

4.9 Seafront garden areas

4.9.1 Trees

Palm trees are planted in groups of three on the boundaries of each living unit next to board walks , revetment wall s or beaches – they will grow tall and when mature will not obscure views but will provide much needed shade from the hot tropical sun. This design element of a continuous palm tree fringe on the island perimeter will reinforce the tropical island appearance.

Trees are planted where suitable behind this palm fringe and are carefully selected for screening, privacy and shade



Palm trees planted on the boundaries to provide shade & enhance a tropical island look.

4.9.2 Lawn

Lawn areas, for recreational use, form part of the front garden lay-out but are kept to a minimum due to maintenance considerations. Lawn is never taken up to the building edge, but restricted to the front of steps.



4.9.3 Boundaries

Boundaries between living units are demarcated and screened for privacy with selected shrubs to create informal hedges.





4.10 Building gravel aprons

A 700mm wide gravel (aggregate) path along appropriate sides of buildings are implemented to provide access to sea front gardens for garden maintenance, and for general building maintenance (e.g. washing of windows) and pest control.





4.11 Hedges

Hedges are planted and pruned informally for visual Screening, privacy and as windbreaks. The height varies according to the application/purpose.







4.12 Pedestrian walkways

Pedestrian walkways provide access to moorings and beaches, also link EPV parking areas. The intention is to have continuous, safe, pedestrian-friendly routes, separate from the EPV roads, to cater for joggers, children and staff.



4.13 Road verges

A 500mm road verge runs on either side of the roads, planted with groundcover *Phylla nodiflora* (Daisy lawn), for EPV use when necessary. This area should always be kept clear of shrubs.



4.14 Public open areas (POA's)

These areas are intended for general home owner use. Areas are demarcated for specific purposes:

4.14.1 Nature area: Mt Eden

Foot paths on this mount are planted with lawn, starting at the North and South ends and lead up to the Lookout Point at the top and to the tree-shaded lawn picnic. The northern slope is planted with a selection of fruit trees, and the southern slope is planted with forest trees & shrubs. At the foot of this mount is a storm-water retention area to provide for the rain-water run-off from this area. Water then drains into the soil via a subsoil sump filled with rocks. Only the fruit trees & lawn area at the Lookout Point will be cultivated, whereas the remainder of this Mount will be regarded as a 'Nature Area'.



4.14.2 Active recreational areas

Open lawn areas are available to cater for active recreational activities (e.g. ball games).

4.14.3 Beaches

Palm trees and other suitable tree species are planted in clusters along the beaches to provide shade in character with other Seychelles beaches. Coastal vegetation is planted on the rock revetment to cover the rocks.

4.15 Irrigation

A drip irrigation system has been installed where feasible. The system optimises the delivery of water to the roots of the plants and minimises misdirection of water under windy conditions in the dry season. The supply lines for the drip system are positioned on top of the soil (for functional reasons) and will over time be overgrown by plants.

Lawns are irrigated with separated lines of low angle static sprayers (pop-up or standpipe). These are selected to run in different groups with high precipitation rates suited to windy conditions. Rotor sprayers are utilized in the wider sloped areas to prevent run off since these sprayers have a much lower precipitation rate.

During the construction phase the individual irrigation line will be run manually via their isolation valves. The final system would run automatically via a central control situated in the irrigation manager's office. The system would use Water Management Tools such as wind, rain and temperature sensors, to minimise water usage.

5. Guidelines

5.1 Introduction

All landscape elements are to form part of the approval process by the developer or the Village Management Association (VMA) and should conform to the landscape design principles & guidelines.

5.2 Soft landscaping (plants)

All planting is to conform to the landscape *design principles* and to the suggested plant list (i.e. plants which are considered functional and in character with the landscape of Eden Island – see Addendum A).

5.2.1 Irrigation

Water usage is minimized for the maintenance of high quality and aesthetically acceptable gardens. However, this must give preference to human consumption, especially in periods of limited water availability.

5.2.2 Maintenance

All maintenance is to be performed in a manner supporting and enhancing the underlying landscape design principles and guidelines.

Landscape maintenance is rationalized to be efficient in labour and resources, whilst creating a well maintained high value environment.

5.3 Hard landscaping (external built elements and artifacts)

5.3.1 Water drainage

Storm-water drainage is managed by a network of surface swales along the roads and between buildings. Care must be taken to not obstruct these water courses.

5.3.2 Footpaths – pedestrian access

- Exposed aggregate concrete footpaths are used for public pedestrian access paths.
- Exposed aggregate concrete pavers are used to provide access in gardens.

5.3.3 Fences

Apart from confined courtyard areas, built fence structures are avoided, and informal plant hedges are used instead.

5.3.4 Pergolas – verandas – screens

See Architectural guidelines

5.3.5 Furniture (chairs, umbrellas, "braai "/ barbeque equipment)

See VMA guidelines

5.3.6 Garden ornaments / sculptures

All to be approved by the VMA

5.3.7 Planting pots

Classical and contempory designer pots are acceptable. In general approval from the VMA is required if placing of the pots are within public view.

5.3.8 Water features (permanent and temporary)

All water features to be approved by the VMA.

Apartments: The only suitable place would be in the court yards. Additional approval is required by the body corporate of each apartment block.

Maisons: No water features are allowed in gardens on the sea side. The entrance court yards are the most likely place for small water features.

Villas: Must fall within the cadastral boundary of each Villa.

Contemporary small water features should be acceptable, for example:









Avoid this type of water feature:



5.3.9 Exterior garden lighting

The general principle is to keep ambient light low and minimise external light pollution – to the approval of the VMA

6. Addendum A: Suggested plant list

The following plants are used and considered to be functional and in character with the landscape of Eden Island

GROUNDCOVERS

Latin	English	Local names
Alternanthera dentata 'ruby'	Purple Knight/Joyweed	
Aster tradescantii		Daisy
Asystasia gangetica	Creeing foxglove	Manztou
Furcrea foetida		
Ipomoea pes-caprae	Beach Morning Glory	Patatran
Lirope query		
Phyla nodiflora	Daisy lawn/Vervaine	Vervenn
Plectranthus sp		
Stachytarpheta urticifolia	Rat's tail	Zepi Ble
Tibouchina		
Tradescantia spathacea		Rhoeo
Wedelia trilobata		

GROUNDCOVERS SHRUBS

Aglaonema sp	Chinese evergreen	
Caladium sp		Kaladium
Calathea sp.		
Cathranthus sp roseus/ alba	Madagascar Periwinkle	Roz Anmer
	baleria	
Dianella ensifolia	Green Dianella	Mangasave
Dianella variegata	Varigated Dianella	
Dieffenbachia sequine	Dumb Cane	Vya tang
Sanseviera trifasciata	Mother in law tongue	Lalang bel mere
Sanseviera hyacinthoides	Green sanseviera	
Solenostemon scutellarioides	Josefskleed	
	Ice cream - varigated	

BULBS

Latin	English	Local names
	Belladonna - orange	
Crinum asiaticum	Crinum Lily	Lis
Hosta		
Hymenocallis littoralis	Spider lily	Lis-bord-d-mer
Hymenocallis littoralis	Giant Spider lily	Lis-bord-d-mer
Neomarica longifolia	Yellow iris	dyties
Zephyranthus candida	Fairy lily	
	Purple flower	

FERNS

	Latin	English	Local names
			Baton
	Angiopteris evecta	Giant fern	Monsennyer
*	*Asplenium nidus*	Bird's nest fern	Lang bef
	Microsorum scolopendrium		Kapiler
	Nephrolepis bisserata	Boston fern	Fouzer Taba

GRASSES

Latin	English	Local names

*	*Bambusa vulgaris*	Dwarf Bamboo	Bambou
	Brachiara umbellata	Lawn grass - Cerf	Gazon Trel
	Cymbopogon	Lemon grass	Sitronel
	Dendrocalamus giganteus	Giant Bamboo	Bambou
	Stenotaphrum dimidiatum	Elephant grass	Lerb Koko
	Pennisetum setaceum 'purpureum'	Purple fountain grass	

CLIMBERS

Latin	English	Local names
Antigonon leptopus	Coral Vine	Antigon
Bougainvillea		Vilea
Ficus pumila	Ticky creeper, Creeping Fig	Lafous
Passiflora edulis	Passion flower	Frilapasyon
Petrea volubilis	Purple wreath	
Philodendron		Filodendron
Quisqualis indica	Rangoon creeper	Lalyann Vermiuz
Syngonium podophyllum		
Thunbergia grandiflora	Bengal trumpet blue/white	

SHRUBS

Latin	English	Local names
Acalypha		
Agave angustifolia 'marginata'		
Allamanda cathartica		Allamanda
Allamanda nobilis		
Allamanda violacea		
Alocasia macrorrhiza /variagata	Pigyam	Vya
Alocasia	Pigyam	Vya
Alpinia Purpurata		Alpinia
Alpinia zerumbet	Red Ginger	
Ananas comosus	Pineapple	Zannanann
Ananas comosus	Red Pineapple – indigenous	Zannanann
Antherium andraeanum		Antyonm
Basil		Basilik
Barleria	Barleria	
Caesalpinia pulcherirma	Pride of Barbados/Peacock Flower	Zegret
Calotropis gigantea	Purple Milkweed	Fler koray
Clerodendrum paniculatum	Pagoda Flower	
Codiaeum variegatum	Croton	Kroton
Cordyline fruticosa	Cordyline	
Costas speciosus	Crepe Ginger	
Costas speciosus	Purple costa	
Costas speciosus variagata	Costa	
Cyperus alternifolius		
Dracaena reflexa	dragon tree	Sandel
Dracaena	broad leaf dragon tree	
Dracaena fragrans	varigated leaf dragon tree	
Duranta repens		
Etlingera elatior		
Heliconia angusta		mordan krab
Heliconia bihai	Heliconia yellow xmas	
Heliconia collinsiana	Heliconia orange_xmas	
Heliconia indica spectabilis		
Heliconia psittacorum	parrot flower	
Heliconia rostrata		
Heliconia stricta		
Hibiscus rosa sinensis	Hibiscus	Ibiskis
Ixora coccinea	Ixora	Bisson
Jatropha	pandurifolia	

Leea coccinea 'burgundy'		
Malvaviscus arboreus	Turk's cap	
Manihot esculenta variegata green cream	Cassava	fler mayok
Pachystachys lutea		
Pentas lanceolata		
Phaeomeria magnifica	Tourch ginger	
Polycias	Polycia tri colour	Tri color
Polycias	Polycia green leaf	
Polycias	Polycia fern leaf	
Pseuderanthemum purpureum		
Russelia equisetiformis	Fountain plant	
Sanchezia nobilis		
Salvia leusantha		
Scaevola sericea	Scaevola	Vouloutye
Thunbergia erecta		

TREES

Trees - FRUIT

Latin	English	local names
Artocarpus altilis	Breadfruit Tree	Friapen
Averrhoa carambola	Star fruit	karanbol
Carica papaya	Papaya or pawpaw	Papaie
citrus acida	Lemon	limon
Mangfiera indica	Mango	mang
Musa sp.	Banana	bannan
Persea americana	Avocado	javoka
Pomegranate	Pomegranate	Grenad
Psidium guyava	Guava	gouyav
Eugenia javanica	Jamalak	jamalak
Eugenia jambo	Jambrosa	Zanbroza
	Golden Apple	frisiter
	Local Apple	ponm
Artocarpus heterophyllus	Jackfruit	zak
Saccharum officinarum	Sugar cane	kann
Psidium cattleianum	Chinese Guava	
Annana reticulata	Oxheart	coeur de boeuf
Annana muricata	Soursou	corsol
	Custard apple	

Trees Small

	Latin	English	Local names
	Cordia sebestena	Geiger Tree	Porse
	Cycas revoluta	sago palm	Sagou
	Gastonia crassa		Bwa Bannan
*	*Guettarda speciosa*		Bwa kasan
	Hibiscus tiliaceus	Sea hibiscus	Var
	Mussaenda phillipica 'Aurorae'		Mussanda
	Plumeria obtusa	Frangipani - white with yellow	
	Plumeria rubra	Frangipani	
	Ravenala madagascariensis	Traverlers palm	Bannan Vwayazer
	Spathodea campanulata		
	Tabernaemontana		Mauritian plumeria
	Tecoma stans		Bwa Taba

Trees Large

Latin	English	local names
Alstonia macrophylla	Alstonia	Bwa Zonn

	Barringtonia asiatica	Fish Poison tree	Bonnen Kare
	Calophyllum inophyllum	Takamaka	Takamaka
	Couroupita guianensis	Cannon ball	
*	*Delonix regia*	Flamboyant tree	Flanbwayan
	Erythrina cristagalli		
	Ficus bengalensis	Banyan tree	Miltipiyan
	Ficus benjamina	ficus	Lafous
	Ficus lutea	ficus	Lafous gran fey
	Heritiera littoralis		Bwa de table
*	*Hernandia nymphaeifolia*		Bwa Blan
	Pandanus sp.		Vakwa
	Paraserianthes falcataria	Albizzia - pienk	Albizia
	Peltophorum pterocarpum	Yellow flame	flam zonn
	Polyalthia longifolia pendula	Ashoka tree	
	Salmanea saman	Rain tree	
	Spathodea campanalata		pis pis
	Swietenia macrophylla	Mahogany	Maougani
	Tabebuia pallida		Kallis Dipap
	Terminalia catappa	Badamier/Indian Almond	Bodanmyen
	Thespesia populnea	Portia Oil Nut	Bwa d roz

TREES - PALMS

	Latin	English	Local names
	Areca catecha	Betel nut palm	
	Caryota urens	Fish tail palm	
	Chrysalidocarpus lutescens	Golden cane palm	Ramo
*	*Chrysalidocarpus madagascariensis*	cane palm	
	Cocos nucifera	Coco nut	Koko
	Curculigo sechellensis		Koko maron
	Deckenia nobilis	Palm heart	Palmiste
	Dictyosperma album	princess palm	
*	*Elaeis guineensis*	Oil palm	
	Hyophorbe lagenicaulis	bottle palm	
*	*Latania loddigesii*		latanier bleu
	Livinstonia	Royal palm	
	Phoenicophorium borsigianum	Thief palm	Latannyen Fey
	Pritchardia pacifica	fuji fan palm	
	Ptychosperma macarthurii	false bamboo (hurricane palm)	Tir kouyon
*	*Raphia farinifera*	Raffia Palm	
	Rhapis humilis		palmier bamboo
	Veitchia merilli	Mauritian palm	