

SENTOSA SENSORYSCAPE

Project Statement

An interdisciplinary and integrative design approach between Architecture and Landscape from its inception has ensured that Sentosa Sensoryscape is an immersive environment to a series of diverse spaces aimed at heightening the sensorial qualities of the vessels and main walk, while creating an engaging visitor experience at every touchpoint.

Sentosa Sensoryscape provides a flexible, inclusive and activated space with enhanced ecological and social benefits for increased connectivity between communities of fauna and flora with visitors, from a diversity of cultures and across all age groups.

As a constantly evolving multi-functional ecosystem that is able to bridge between the present and future, Sensoryscape will grow and thrive with matured planting through time, forming an important bridge between ecological stepping stones within the island and the wider site context of Singapore.



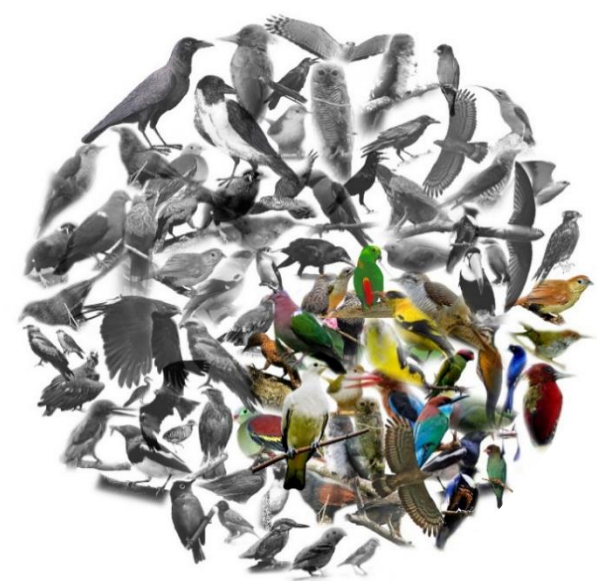
SENTOSA SENSORYSCAPE
3 Siloso Rd, Singapore

Area: 31,791.82 sqm
Construction cost: N.A

Completion Date: March 2024



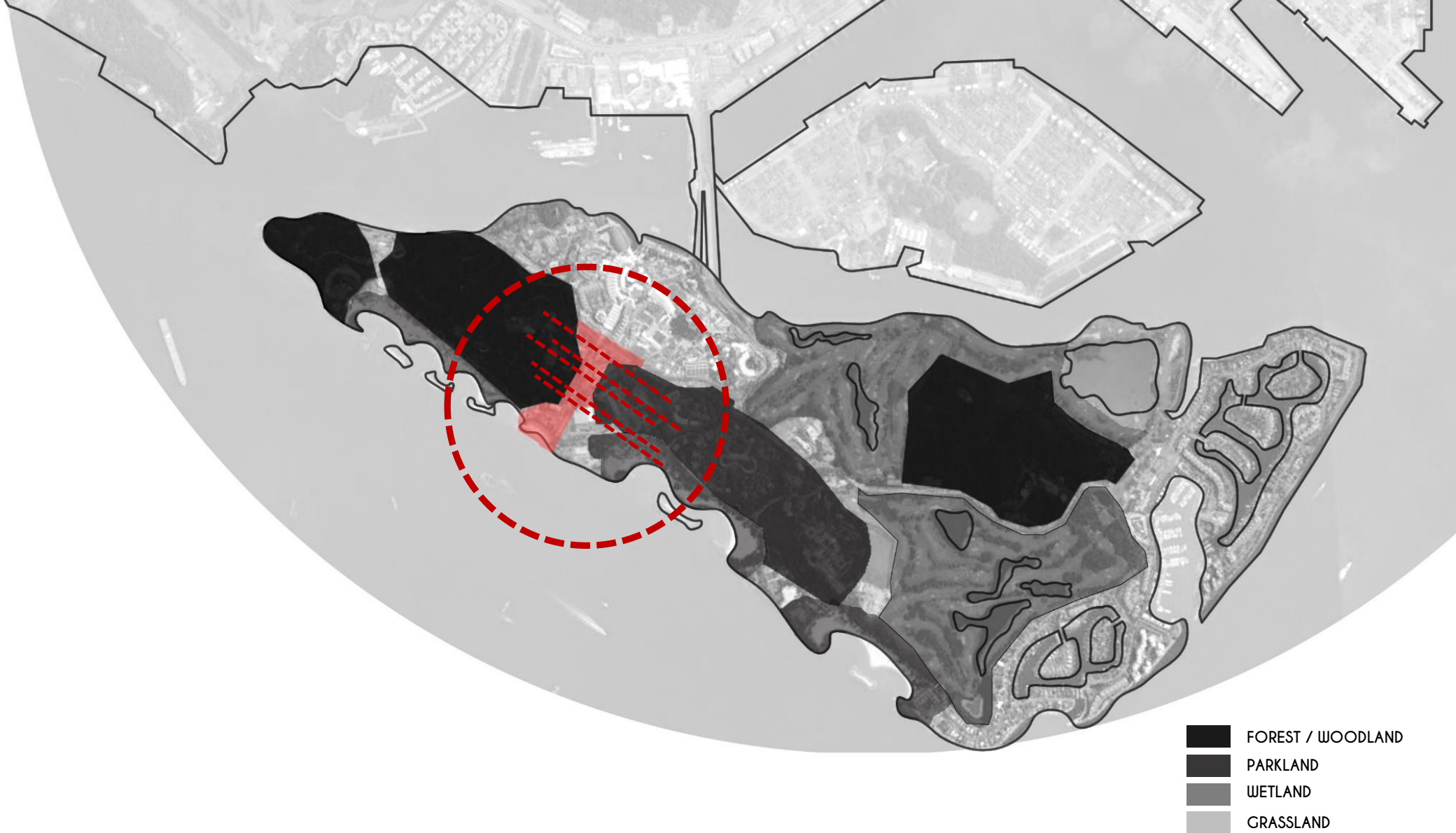
EAST ASIAN-AUSTRALIAN FLYWAY
 SENTOSA ISLAND
 STOPOVER POINT SOUTH TO INDONESIA



Resident (RB & R (B)): 61 species
 Migratory (WV & PM): 18 species
 Non-breeding visitor (NBV): 2 species
 Migrant breeder (MB): 1 species
 Newly introduced: 2 species
84 resident and migrant bird species recorded in Sentosa Island
23% out of total bird species within Singapore

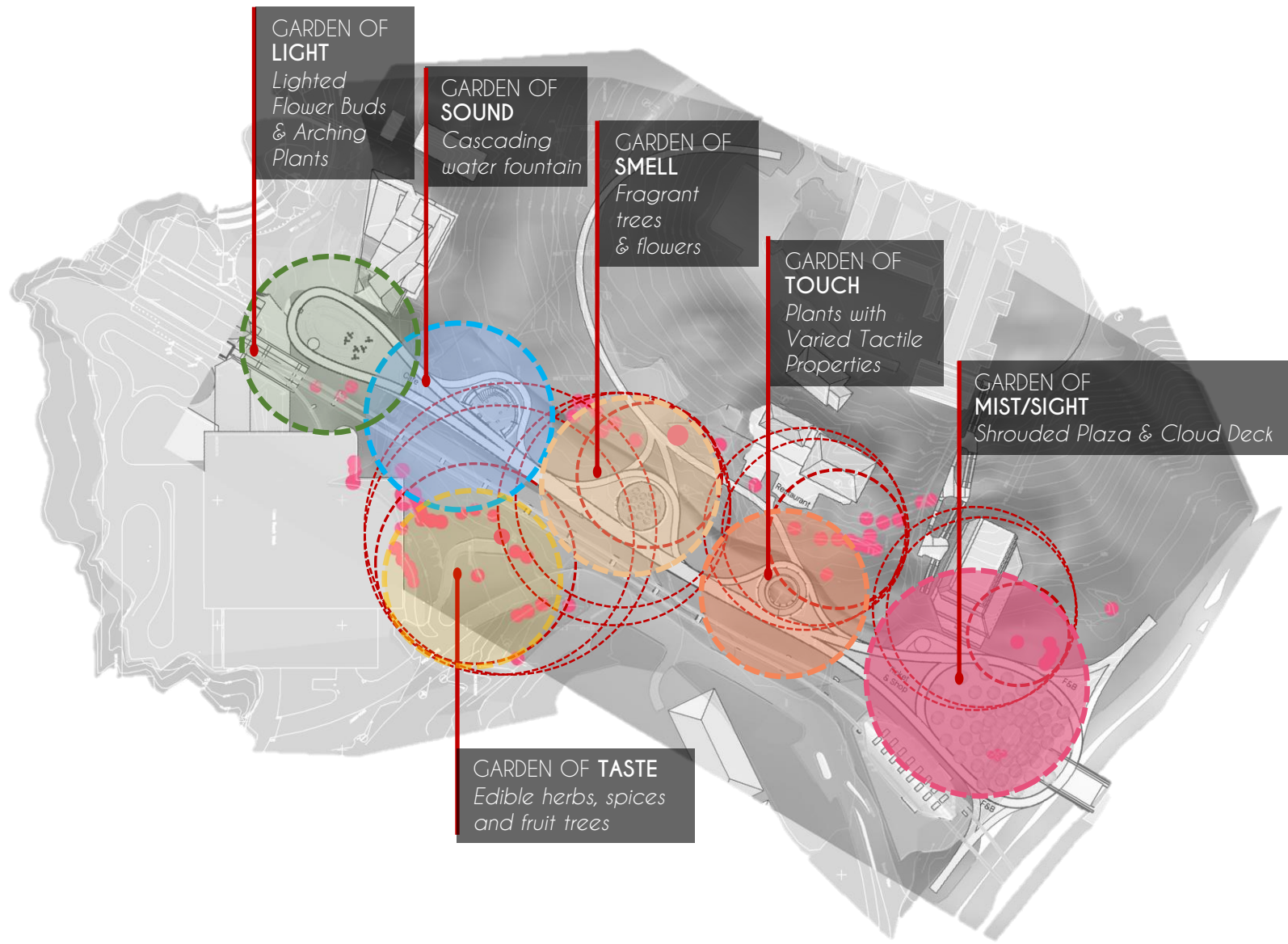
Sentosa is a key stop-over point on the East Asian-Australian Flyway

Sentosa's position south of the mainland has made it a good stopover point for migratory birds making their way down south to Indonesia to escape the winter chill in the north, forming the East Asian-Australian Flyway. Identified existing ecological valuable tree clusters were further enhanced with projected extent of proposed tree planting for canopy connectivity required for avian fauna of birds and butterflies' movements along the East-West axis.



The Site As a Key Stepping Stone Connects between 2 Ecological Zones, Forming the Continuous Ecological Corridor

As the main artery connecting between North and South of Sentosa, Sensoryscape posits as an integral ecological stepping stones for the movement of avian fauna within East Asian-Australian flight corridor, whilst maximizing conservation of the natural heritage.



**GARDEN OF
LIGHT**
*Lighted
Flower Buds
& Arching
Plants*

**GARDEN OF
SOUND**
*Cascading
water fountain*

**GARDEN OF
SMELL**
*Fragrant
trees
& flowers*

**GARDEN OF
TOUCH**
*Plants with
Varied Tactile
Properties*

**GARDEN OF
MIST/SIGHT**
Shrouded Plaza & Cloud Deck

GARDEN OF TASTE
*Edible herbs, spices
and fruit trees*

Botanical Collection Of Plants for the 5 Senses Integrated with Ecological Corridor

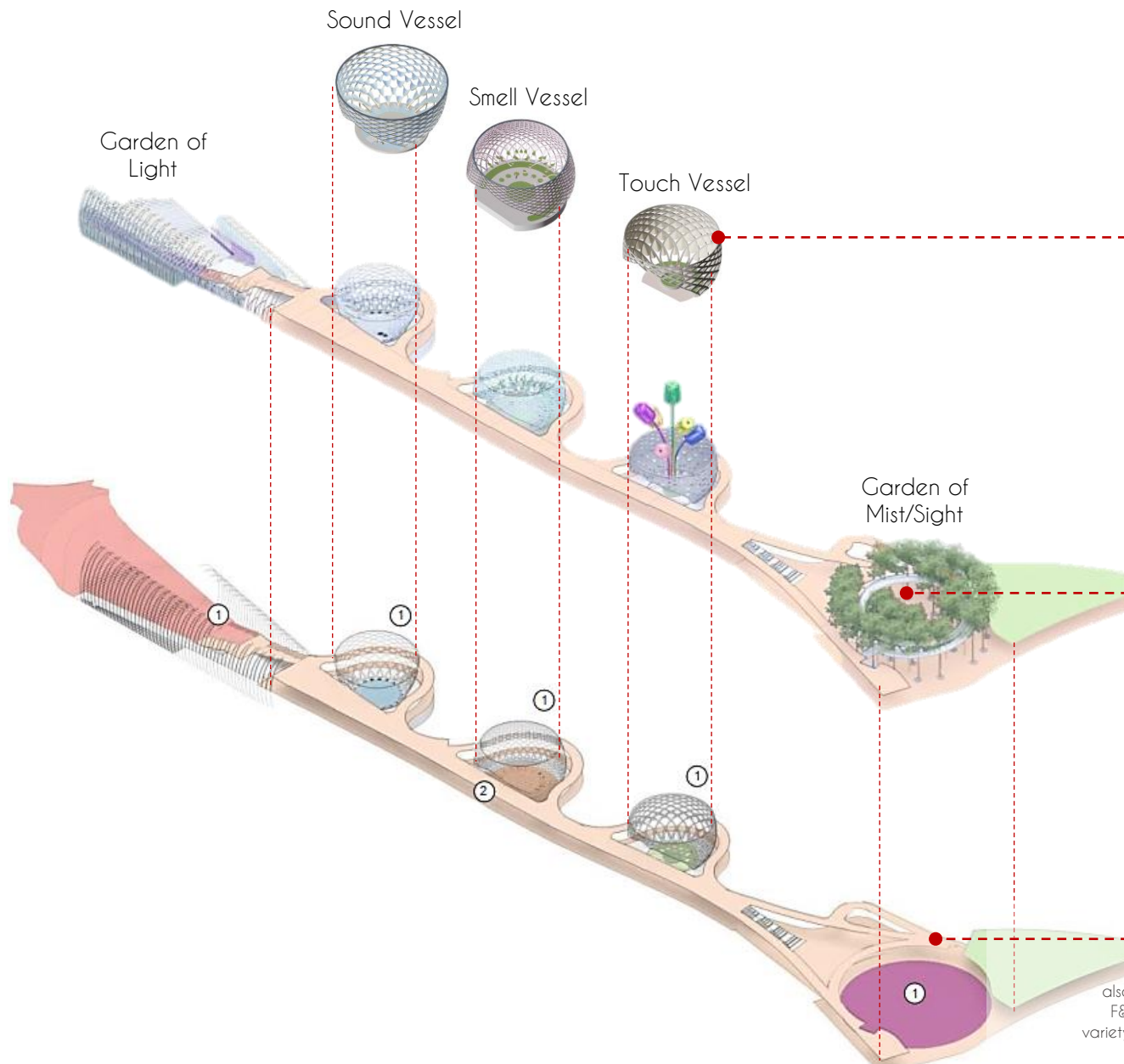
A total of 38,270 numbers of trees and shrubs, of which more than 116 different native and fauna-attracting plant species were introduced to ensure for biodiversity continuity, whilst integrating within each micro-climate context and designed sensorial requirements of the varied thematic zones.



Sentosa Sensoryscape an Ecological Walk that Links Sentosa Together

Sensoryscape enables a unique encounter between our senses and the surroundings. The overall design aims at creating a holistic experience based on a journey through several horizontal layers of the site and surrounding landscape - resulting in a distinctive panorama that influences the experience in all of our senses.

Integration of the proposed green spines along Sensoryscape enabled for seamless connectivity between the development, landscaped terrains and its wider context.



Basket-Inspired Woven Structure

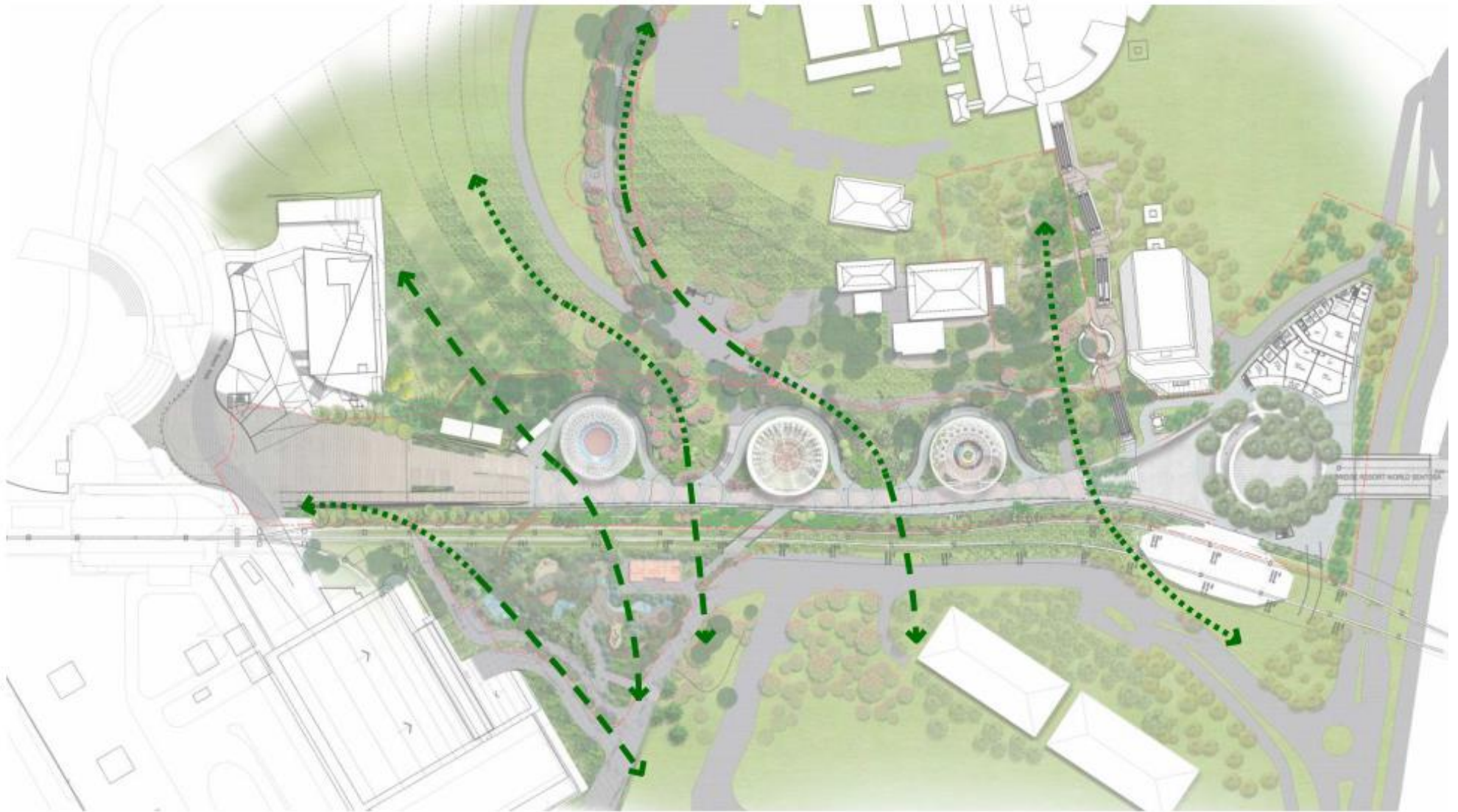
The architecture design of the vessels seeks to strike a delicate balance between nature and structure, openness and closure. The unique and delicate diagrid structures of the sensory gardens are calibrated to foster a deeper connection with the surrounding environment, and seamlessly blend the built structures with the island's natural beauty.

Sensory Gardens

The walkway is punctuated with sensory gardens, each Vessels are complemented by Gardens containing distillations of Sentosa's nature that stimulates one's senses, yet invites one's own interpretation of its uses.

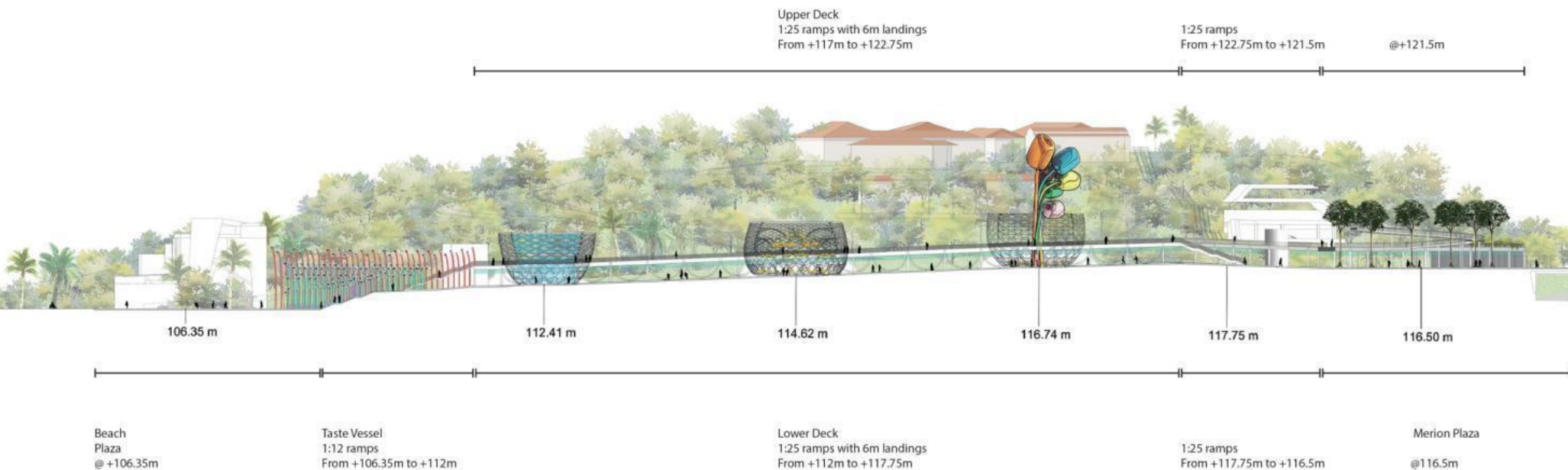
Main Walk, Elevated Deck & Vessels

The main walkway contains a varied open space and Forms a welcoming entrance from Resorts World Sentosa, also providing seating and wayfinding along the walk. Containing the F&B, retail and services next to the Garden of Mist, it can also host a variety of programming and facilitates connections to the wider precinct.



Ecological Continuity Across the Site

New trees planting integrated with existing conserved trees are allowed to flow across the walkway, creating the ecological continuity that connects beyond the boundaries of the development, facilitating movements of avian fauna within Sentosa Island and beyond.



The Walk Hugs the Topography and achieves Universal Access Across the entire length

Designed with users in mind, the entire 350m thoroughfare is integrated with gentle 1:25 gradient and universal accessibility features of ramps and lifts. Lined with towering sensory gardens combining nature, architecture and technology. The elevated universal accessible walk with connection points between upper and lower deck at every 90m interval, affording an dynamic environment of changing levels with new view corridors and varying sense of depth across Sensoryscape.

LEGEND

1. GDN OF MIST/SIGHT
2. CLOUD DECK
3. GARDEN OF TOUCH
4. GARDEN OF SMELL
5. GARDEN OF SOUND
6. GARDEN OF TASTE
7. GARDEN OF LIGHT
8. IFLY
9. BEACH STATION
10. OUTPOST HOTEL SENTOSA & VILLAGE HOTEL SENTOSA
11. OASIA RESORT SENTOSA
12. IMBIAH STATION
13. MERLION STATION
14. MADAME TUSSAUDS SINGAPORE
15. I-FLOWERHILL



OVERALL SITE PLAN

The strategic location of Sentosa Sensoryscape as the main artery connecting between North and South of the island, with enhanced capacity now for multi-functional plaza spaces for events and collaborations, interconnected routes that facilitates connections to the wider precinct. Together with the immersive, multi-sensorial experience coupled with nightly light shows and augmented reality offerings, Sensoryscape has resulted in overall dwelling time and increased footfall for the island.



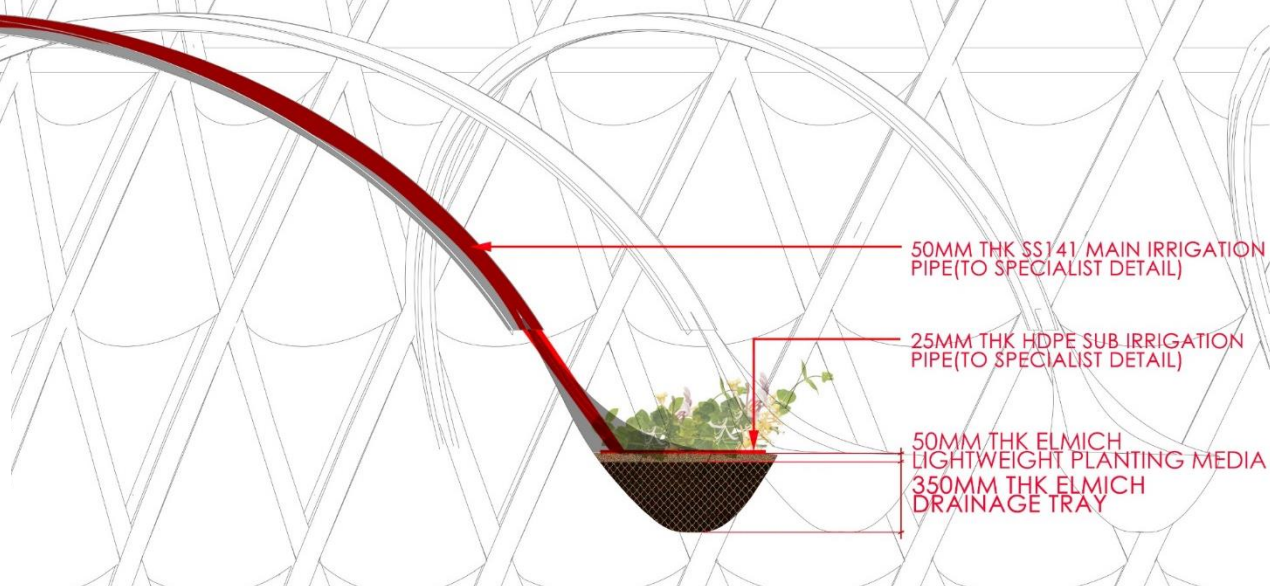
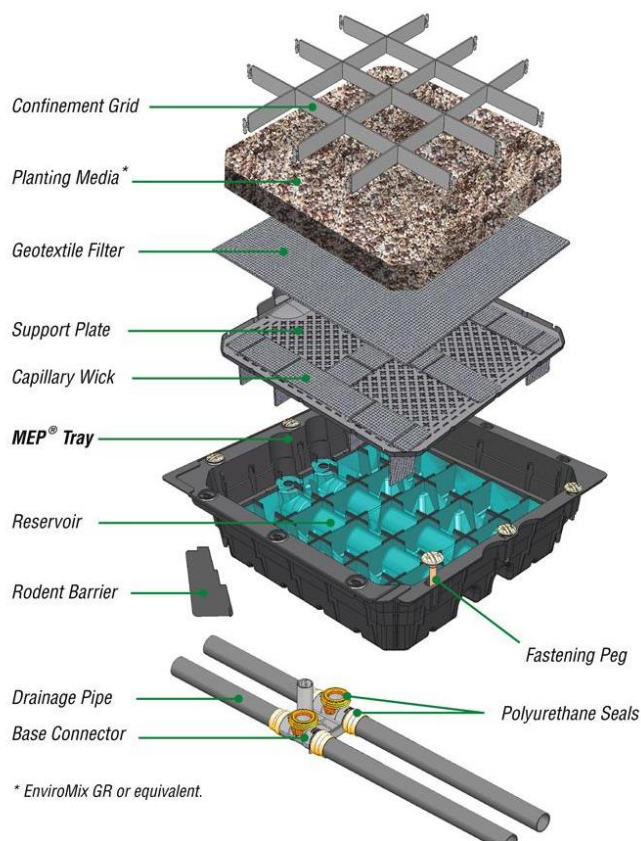
Garden of Mist/Sight

This multi-sensory experience begins as visitors approach from Garden of Mist/Sight amidst the tall Pink and Red Mempat trees. One takes on an experience of discovery along the cloud deck, following the stream of the occasional misting that unveils the dense canopies of Mempat trees while meandering across the changing elevations of the elevated cloud deck.



Garden of Smell

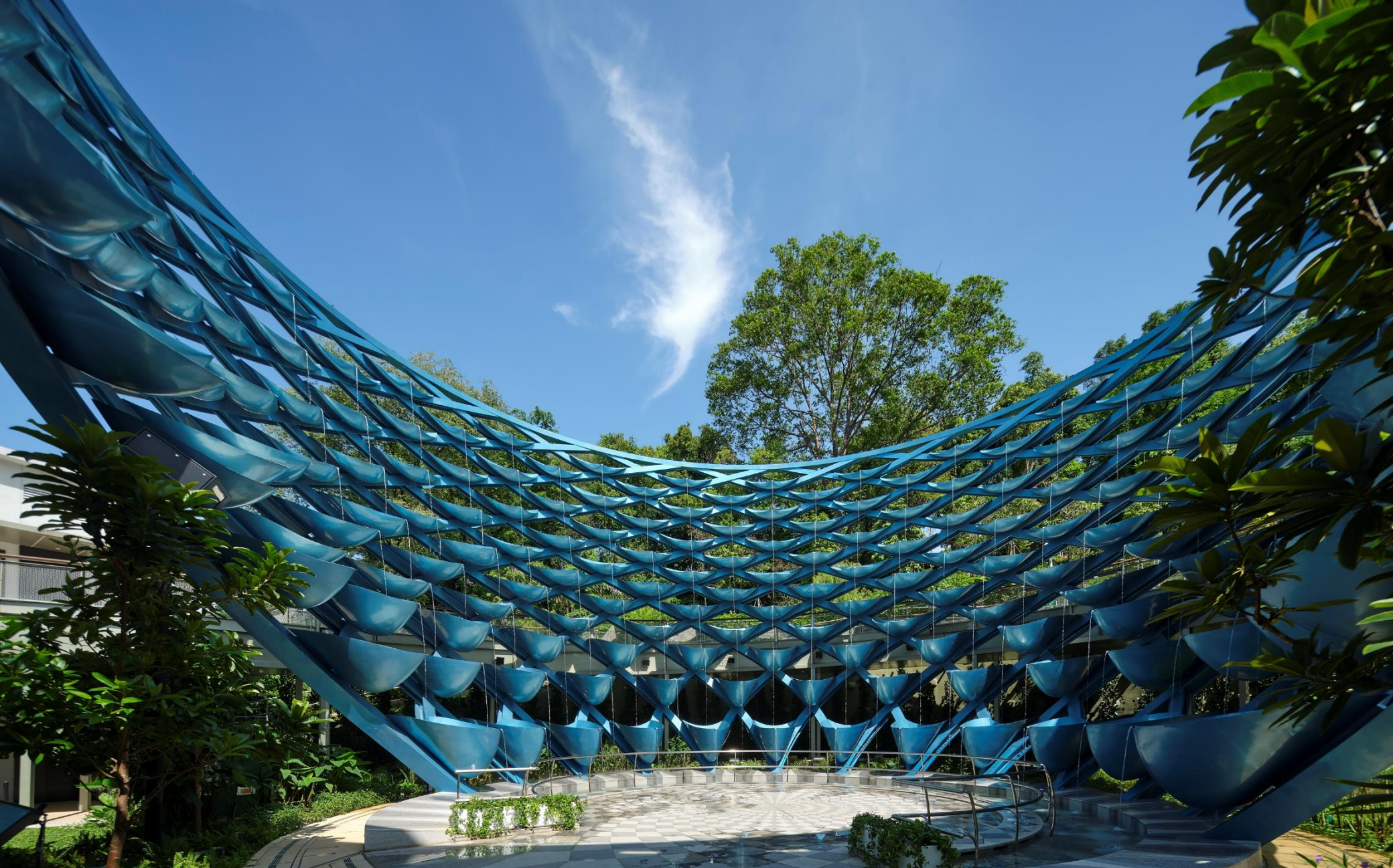
Whiff in the fragrances from surrounding flora as one moves along the ground and finally turn one's attention towards the flowering *Citharexylum* (Fiddlewood), *Tarenna odorata*, *Cyrtophyllum fragrans* (Tembusu) and *Alstonia angustiloba* (Pulai) trees.



Enviromix PB	
Dimensions	Size: 498mm L x 333mm W x 50mm H Weight: approx. 14.4kg/m ² (dry) approx. 45.0kg/m ² (saturated)
Physical properties	<ul style="list-style-type: none"> • Panel form enables easy transportation • Less than half weight of conventional soil mix • Microwave sterilisation ensures panels are pest and pathogen-free • Stackability reduces storage space requirements • Does not stain
Flexibility	<ul style="list-style-type: none"> • Superior water retention supports plant growth during dry spells • Integrated nutrients facilitate quick establishment and healthy plant growth • Suitable for most groundcover plants and shrubs • Easily cut for flexible design and layout
Cost-effective	<ul style="list-style-type: none"> • Fast installation as panels are simply abutted against each other • Minimal soil-mix required - none required for turling • Reduces fertilization frequency and dosage

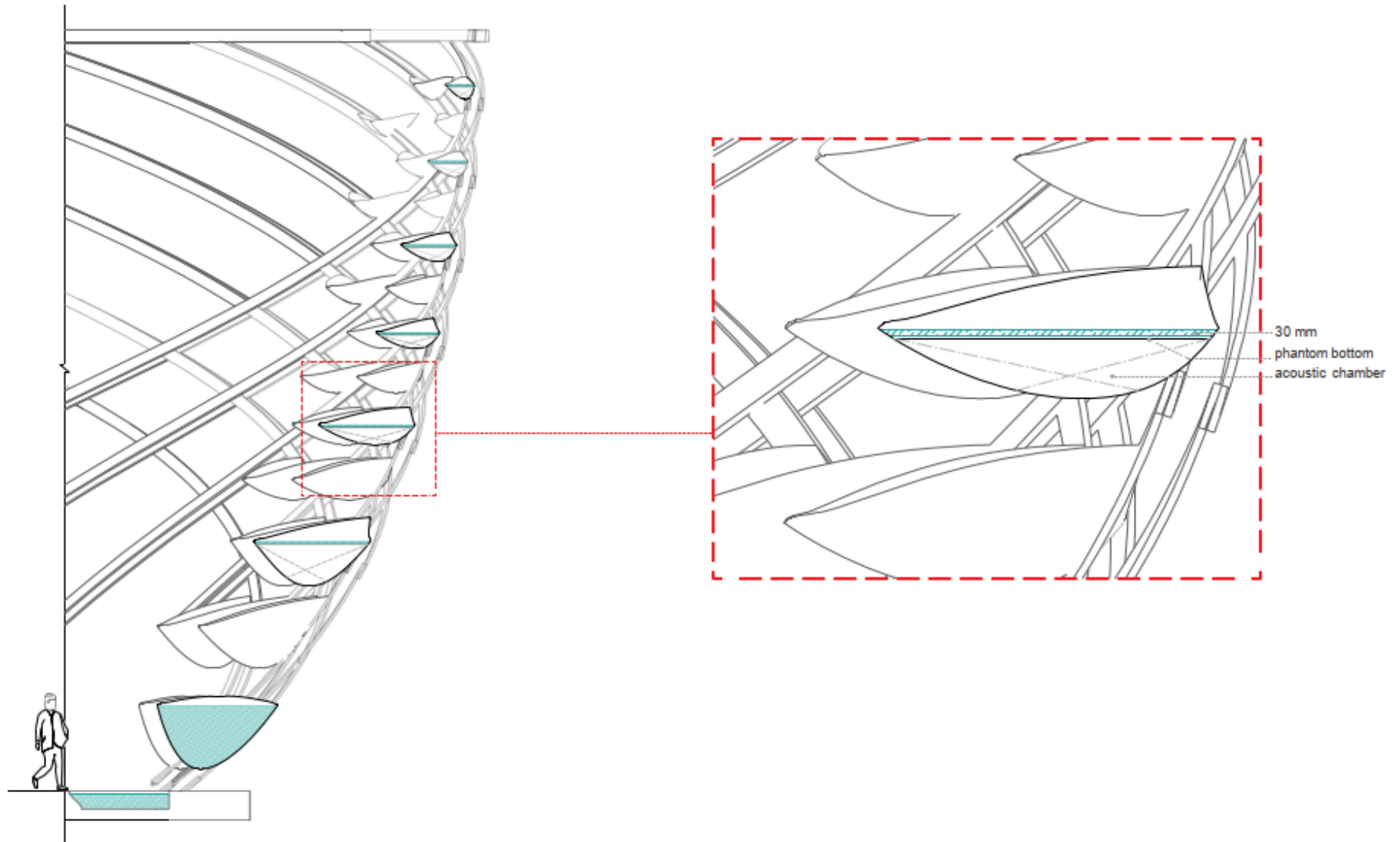
The Cantilever Planter Buds

Designed with maximum loading and maintainability requirements, each planter buds are integrated with lightweight planting media, auto-irrigation with fertigation system and hardy *Lonicera japonica* creepers to reduce maintenance frequency. All planting areas are designed to have full auto-irrigation system that is linked to BMS and rainwater sensor to ensure water needs are optimized and minimum water wastage. Fertigation within irrigation system will also allow for fertilizer to be dispensed easily without workers, hence reducing need for manual labour and access.



Garden of Sound

Taking in the orchestra of sounds created water streaming down the cascades of metallic bowls with rustling of leaves and matured pods of *Crotalaria retusa* (Rattlebox). The lightness and leanness of the structure allow surrounding nature, views and light to permeate through.



Cascades of Metallic Bowls

Each vessel pail consist of a shallow plate of water with an acoustic chamber, water flowing down along the subtle gradient of the metallic bowl base plate from each moulded niche opening, gently amplifying the cascading sounds of water movement.



Garden of Light

Flower buds glow at night with soft ever-changing lighting effects, integrated with arching plant species of *Calathea lutea*, *Heliconia rostrata*, *Heliconia longiflora*, *Heliconia psittacorum* 'Black Cherry'; and *Heliconia* 'Golden Torch Sunshine'. An amphitheater fronts the plaza with the stalks & buds filters out the visual noise whilst opening the views to the beach.



Garden of Taste

Showcasing edible plant species of local herbs and spices used in Southeast-asian cooking that can also grow well under the sunbathed conditions and interspersed with avian fauna attracting species throughout the garden, Garden of Taste also has multi-functional plaza that allows for digital floor projections across with augmented reality offerings.



Ecological Bands of New & Existing Planting Amidst Elevated Walkway

Continuum of greenery unfolds along the horizontal axis of Sensoryscape, connecting with the variety of habitat typologies within Sentosa Island. Lush greenery of diverse planting species further increases the visual interest in the complementary reading of planting layers integrated amidst botanical collection of thematic gardens and sensorial vessels.

SENSORYSCAPE PLANTING PALETTE LIST

SHRUBS & GROUNDCOVERS

Acachis pintoí
Acanthus ebracteatus
Acrostichum aureum
Agave attenuate
Aglaia odorata
Aglaonema commutatum 'Malay Beauty'
Alpinia galanga
Antigonon leptopus
Araucaria excelsa
Ardisia elliptica
Arundina graminifolia
Asparagus umbellatus
Asystasia gangetica
Blechnum gibbum
Brennia disticha 'Roseo-picta'
Calathea loeseneri
Calathea lutea
Calla palustris
Calotropis gigantea
Cananga odorata var. jasminoides
Casuarina glauca
Centotheca lappacea
Cheilocostis speciosus
Chonemorpha fragrans
Clematis aristate
Clerodendrum buchananii
Clerodendrum inerme
Clerodendrum paniculatum
Colocasia esculenta
Colubrina asiatica
Combretum indicum
Costus speciosus
Crinum asiaticum
Crossostephium chinense
Crotalaria retusa
Cymbopogon citratus
Cyperus papyrus
Davallia denticulate
Dendrobium umbellatum 'Aureum'
Dianella ensifolia 'Green'
Dillenia suffruticosa
Dissotis rotundifolia
Dolichandra unduis-cati
Dracaena cambodiana

Duranta erecta dwarf 'Variegated'
Duranta erecta 'variegated'
Echinododrus palaefolius
Epipremnum aureum Giant
golden pothos
Equisetum hyemale
Etlingera elatior
Eugenia eniflora
Euodia ridleyi
Euphorbia tithymaloides
Fagraea ceilanica
Ficus nitida 'Gold'
Gardenia jasminoides
Grammatophyllum speciosum
Gynura procumbens
Heliconia chartacea 'Sexy Pink'
Heliconia 'Golden Torch Sunshine'
Heliconia indica cultuvar
Heliconia longiflora
Heliconia psittacorum 'Black Cherry'
Heliconia rostrata
Hibiscus mutabilis 'White'
Homalomena rubescens
Hoya latifolia
Ipomoea batatas
Ipomoea pes-caprae
Ixora congesta
Ixora lobii
Ixora pendula
Jasminum elongatum
Jasminum multiflorum
Jatropha integririma
Juniperus (round pine)
Juniperus spp '
Leea rubra
Leucophyllum frutescens
Lonicera japonica
Manihot esculenta var
Mansoa alliacea
Melastoma malabathricum
Memecylon caeruleum
Molineria latifolia var latifolia
Monstera deliciosa
Murraya koenigii

Murraya paniculata
Mussaenda glabra
Nepenthes gracilis
Nephrolepis biserrata
Nephrolepis cordifolia'
Nephrolepis exaltata
Nephrolepis falcata
Nerium oleander variegated
Orthosiphon aristatus
Osmanthus fragrans
Osmoxylon lineare 'Yellow'
Pandanus amaryllifolius
Pandanus dubius
Pandanus pygameus 'White'
Passiflora biflora
Passiflora coccinea 'Red'
Pedilanthus tithymaloides
Pennisetum advena 'Rubrum'
Pennisetum setaceum
Petraeovitex wolfei
Phanera bidentata
Philodendron erubescens 'Gold'
Philodendron xanadu
Phyllanthus cochinchinensis
Piper sarmentosum
Pluchea indica
Podocarpus spp.
Pogonanthum panicum
Portulaca pilosa sp. Tuberosa
Premna serratifolia
Pseuderanthemum carruthersii
var.carruthersii 'Reticulatum'
Pseudomussaenda flava
Rhapis excelsa
Rhodomyrtus tomentosa
Rothea myricoides
Ruellia brittonia
Russelia equisetiformis
Sabina chinensis
Sanseveria superba
Sanseveria trifaciatia 'moonshine'
Scaevola taccada
Schefflera arboricola 'Worthy'
Sedum mexicanum

Selaginella wildenowii
Senna alata
Sophora tomentosa
Spathiphyllum cannifolium
Spathiphyllum sensation
Spathoglottis plicata
Strophanthus gratus
Syngonium podophyllum (Green)
Syngonium podophyllum 'White Butterfly'
Syzygium myrtifolium
Tetracera indica
Thaumatococcus daniellii
Thuja accidentalis 'Janed Gold'
Thuja pine
Tradescantia spathacea
Tristellateia australasiae
Typha angustifolia
Vernonia elliptica
Volkameria inermis
Wedelia trilobata
Xanthostemon youngii
Zingiber officinale

SENSORYSCAPE PLANTING PALETTE LIST

TREES AND PALMS

Alstonia subspatulata	Millingtonia hortensis
Aquilaria malaccensis	Muntingia calabura'
Ardisia elliptica	Myristica fragrans
Areca catechu	Neolitsea cassia
Averrhoa bilimbi	Nephelium lappaceum
Averrhoa carambola	Peltophorum pterocarpum
Baccaurea parvifolia	Podocarpus polystachyus
Barringtonia asiatica	Pometia pinnata
Buchanania arborescens	Pouteria obovata
Caesalpinia ferrea	Psidium guajava
Calophyllum inophyllum	Rhodomnia cinerea
Ceiba speciosa	Sandoricum koetjape
Cerbera manghas	Scaphium macropodium
Citharexylum spinosum	Senna alata
Coffea arabica	Spondias dulcis
Cola nitida	Sterculia parvifolia
Conocarpus erectus var. sericeus	Sterculia rubiginosa
Cordia subcordata	Suregada multiflora
Cratoxylum cochinchinense	Syzygium aqueum
Cratoxylum formosum	Syzygium jambos
Cynometra ramiflora	Syzygium lineatum
Dillenia excelsa	Syzygium zeylanicum
Dillenia indica	Tabebuia aurea
Dimocarpus longan	Tabebuia rosea
Diospyros blancoi	Tarenna odorata
Eucalyptus deglupta	Theobroma cacao
Eurycoma longifolia	Tristanopsis merguensis
Fagraea fragrans	Tristanopsis obovata
Garcinia atroviridis	
Garcinia mangostana	
Garcinia subelliptica	
Gardenia carinata	
Gardenia tubifera	
Gnetum gnemon	
Knema globularia	
Lagerstroemia floribunda 'jack'	
Lagerstroemia langkawiensis	
Lagerstroemia speciosa	
Leptospermum brachyandrum	
Magnolia alba	
Magnolia champaca	
Melaleuca cajuputi	
Milettia pinnata	