

Singapore is competing for status as a global destination. Under pressure from rapidly emerging Chinese cities, the island country is pulling out all the stops: last month saw the world's first floodlit Formula One race, with lamps installed every four metres of the five-kilometre track, bringing the event in sync with the world's prime time TV audiences and avoiding the almost unbearable conditions of midday tropical climate. Elsewhere, vast infrastructure projects mark the city's growing ambitions with the reclamation of hundreds of hectares of land to provide valuable waterside sites for both public and private development.

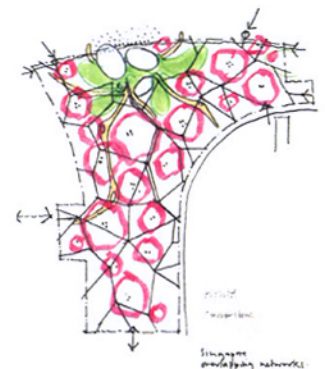
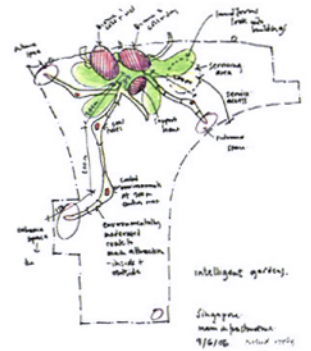
In 2006, Grant Associates (landscape architects of the 2008 Stirling Prize winning

Accordia housing development in Cambridge) assembled an impressive team which won the competition to design one of Singapore's most ambitious projects, the Gardens by the Bay, Marina South, on one such reclaimed site. The project is not a high-density group of high-rise buildings, however, but rather a high-density, high-rise and extremely intensive landscape park, commissioned by the country's National Parks Board.

Working with architect Wilkinson Eyre, structural engineer Atelier One, environmental engineer Atelier Ten, interpretation consultants Land, quantity surveyor Davis Langdon & Seah, and infrastructure consultants Meinhardt, founder of Grant Associates Andrew Grant took

inspiration from the orchid, the plant that has become emblematic of Singapore itself.

Orchids are epiphytic, that is a plant that grows above the ground surface, using other plants or objects for support in order to reach positions where the light is better or where they can avoid competition for light. Grant explains the evolution of his masterplan with five key diagrams related to the orchid: the garden takes root on a piece of new infrastructure and grows towards the city; leaves (earthworks) and roots (water, energy, communication systems) and shoots (paths, roads and links) create an integrated network across the park, into which beautiful flowers (feature/theme gardens) emerge at key intersections.



SINGAPORE SUPERNATURE

Despite huge land values, Singapore prioritises landscape, setting aside hundreds of hectares of reclaimed land for public gardens.

1 & 5
Green Wall and Sunken Garden. As part of Grant Associates' masterplan, these two earthworks extend into the garden.

2
Andrew Grant's sequential masterplan sketches describe his concept of leaf shoots and roots.





3

3
The final masterplan,
showing Wilkinson Eyre's
conservatories to the
north.

4
The covered walkway
provides essential shelter
and opportunity for secret
sunken gardens.



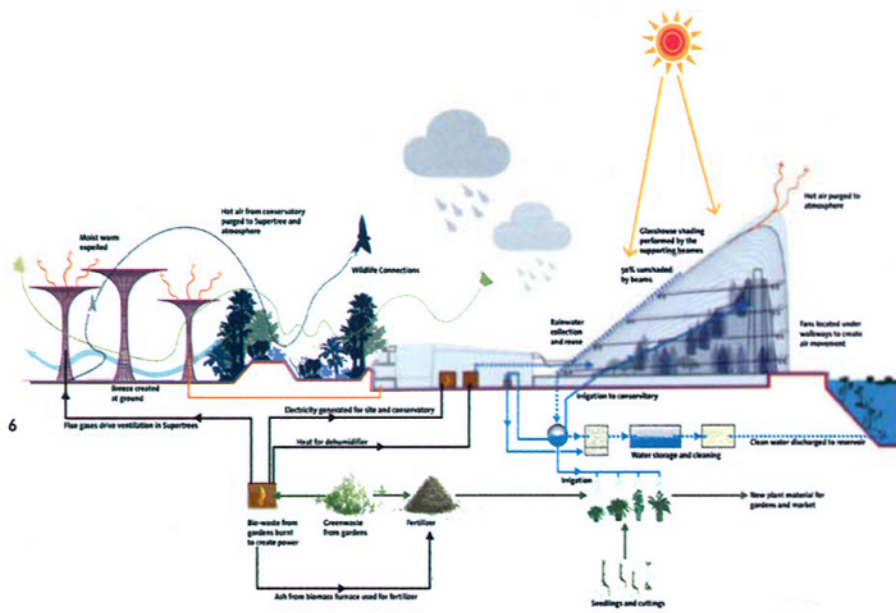
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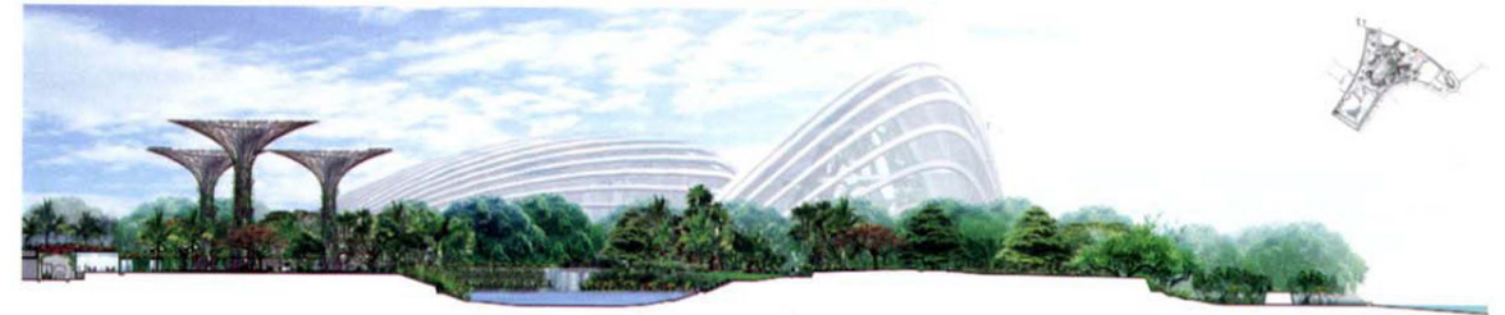
east-west section through Lion Grove, flanked either side by Green Wall and Sunken Garden



6 Schematic drawing of ecosystem – by Atelier Ten.
7 & 8 Chromatic studies of Supertrees – engineered by Atelier One in collaboration with Chris Williams.
9 Sectional axonometric, showing three principal thematic areas, cut west to east.



10 New habitats extend inside conservatories, designed in collaboration with Wilkinson Eyre.



north-south section through arrivals area



NATURE'S BALANCE



10

PLANTS AND PLANET

Rising between 25 and 50 metres high, and loosely inspired by the visionary scenes of Studio Ghibli, the 'supertrees' are the most prominent landscape feature, described by Grant as a fusion of nature, art and technology. Conceived as vertical tropical gardens, dripping with ferns, orchids and climbers, they also act as the environmental engines for the gardens, equipped with photovoltaics, solar thermal collectors, rainwater harvesting devices and venting ducts.

Work on the 54 hectare park is proceeding at breakneck speed. Starting on site just six months after the competition result was announced, the team are busily preparing tender documentation, with a completion target at the end of 2010, and a public opening planned in 2011. ROB GREGORY