

of Sweet Water

genius loci **e2**LARGE NATURAL BODY OF FRESH WATER BY THE SEA

When the architects first arrived on the site of Estate 2, they were surprised to discover a large natural fresh water pond, an unusual occurrence for a location of such proximity to the beach. Surrounding this large body of sweet water were three luxuriant stands of native bamboo, and within it, a tiny 'island' with a rain forest tree.

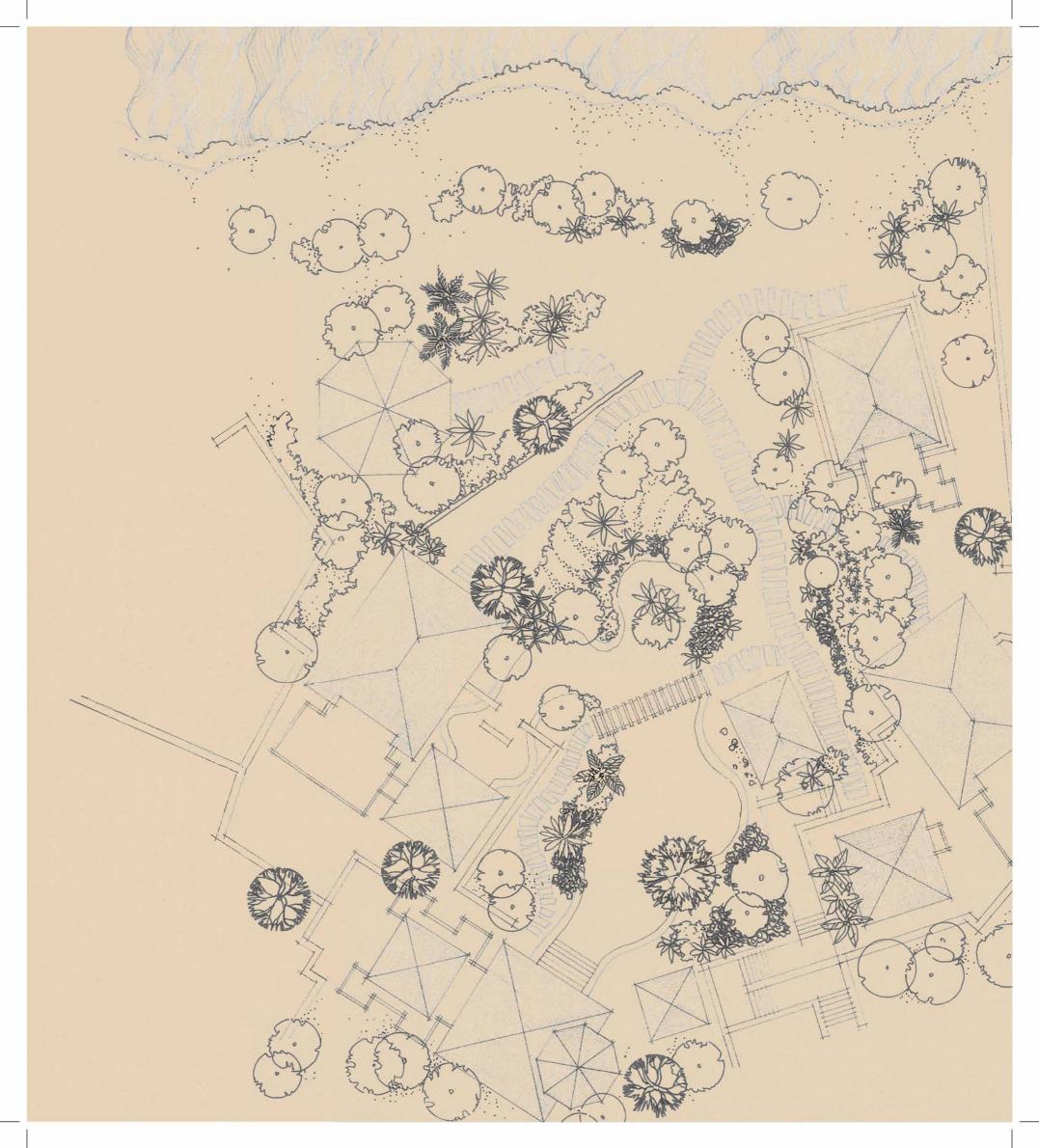
This body of water was undoubtedly the *genius loci* of Estate 2. In line with the policy of "treading lightly upon the land", the decision was firmly made to maintain the large pond in its original position, and it was gently (in the words of the architects) 'massaged' to become a swimming pool. Keeping faithful to the pond's natural level, contours and depth, the swimming pool had to forgo the overflow effect and is thus not an infinity pool like the pools in the other Estates. However, the resulting benefits are immensely beautiful.

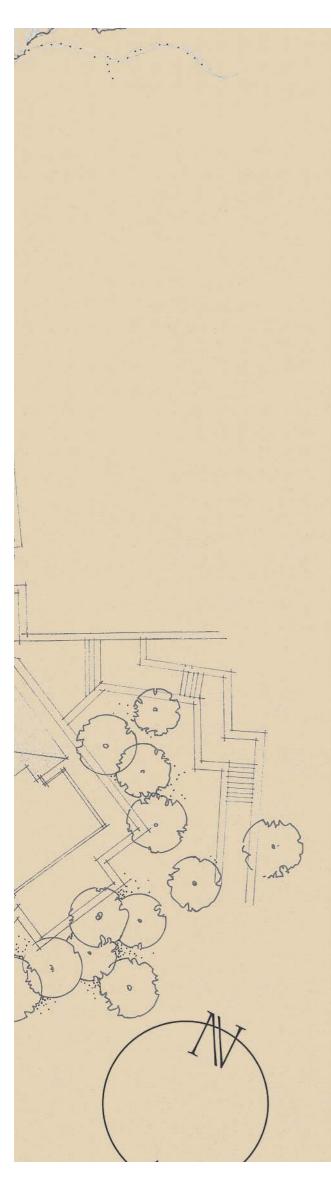
The therapeutic properties of water are integrated into the architecture of Estate 2 in the spirit of this region's traditions. Water and bathing are so much a part of Malay Archipelago culture that early European explorers were shocked by the frequency, playfulness and casualness with which natives approached bathing. In "The Living House", Roxana Waterson reported that Jean Gelman Taylor, an analyst of the East Indies in early 17th century, noted how Dutchmen "were scandalised by the sight of their mistresses bathing in

full public view in the River Ciliwung." In Borneo and Bali up to the 1960s, women dressed in no more than a sarong tied waist high would swim and bathe in the waterfalls, streams and rivers near their homes on a daily basis, sometimes several times a day. When taking their ritual baths in temples, Balinese women would be similarly attired.

On his travels among the natives of Malaysian Borneo, Harrison W. Smith noted in his February 1919 *Geographic* article that "as with most of the Sarawak tribes, personal cleanliness is the rule." He wryly added, "The Dayaks have been known to comment on a white traveller to the effect that, although he seemed to be otherwise all right, he did not bathe as frequently as they considered necessary."

In virtually all South East Asian cultures, different forms of water festivals are still practised until today, the most prominent being the Thai Water Festival or *Songkran*. Even in Malaysia, the ancient water festival of *Mandi Safar* persisted until the mid-1970s despite Muslim religious authorities forbidding it as being an un-Islamic practice. Among the staunchly Christian Luso-Malay or Portuguese descendants in the Malaysian state of Melaka, pre-Lenten revelry called *Intrudo* is celebrated in true Malay Archipelago style, with much splashing, wet T-shirts and laughter.





Estate 2

Estate 2 is located in the private enclave of Marina Bay, within mere metres of the shoreline. Unique among the beachfront Estates, it is the only one with a vast naturally-formed pond of fresh water. Besides that, this property also offers:

- Three bungalow bedrooms
- Two outdoor jacuzzis
- Free-form swimming pool
- Living pavilion
- Dining pavilion
- Sitting pavilion
- Bar pavilion

All built structures centre around its *genius loci*, the natural freshwater pond – into which a swimming pool has been 'massaged' – with all its original curves, bays and tiny 'islands' left intact. A carved wooden bridge arches over the azure waters of the pool, linking stands of prehistoric cycads with native bamboos. Of its three bungalow bedrooms, two have outdoor baths in their private gardens, while the third has steps leading directly from the bedroom into the pool, perfect for a romantic moonlight swim.

Personalities that have enjoyed the facilities of Estate 2 include Sting and Kiera Knightly of "Pirates of the Caribbean" fame.











WATER, WATER, EVERYWHERE

The architects of Estate 2 paid tribute to the Malay Archipelago's celebration of water by making its pool the central element of the entire property. Like the spokes of a wheel, all three bungalow bedrooms – plus the living, sitting and dining pavilions of Estate 2 – radiate from this large pool that winds round island-like stands of tropical vegetation. In a playful interpretation of the Balinese temple bath, the architects incorporated a carved stone crocodile that spouts water, a delight for both children and adults.

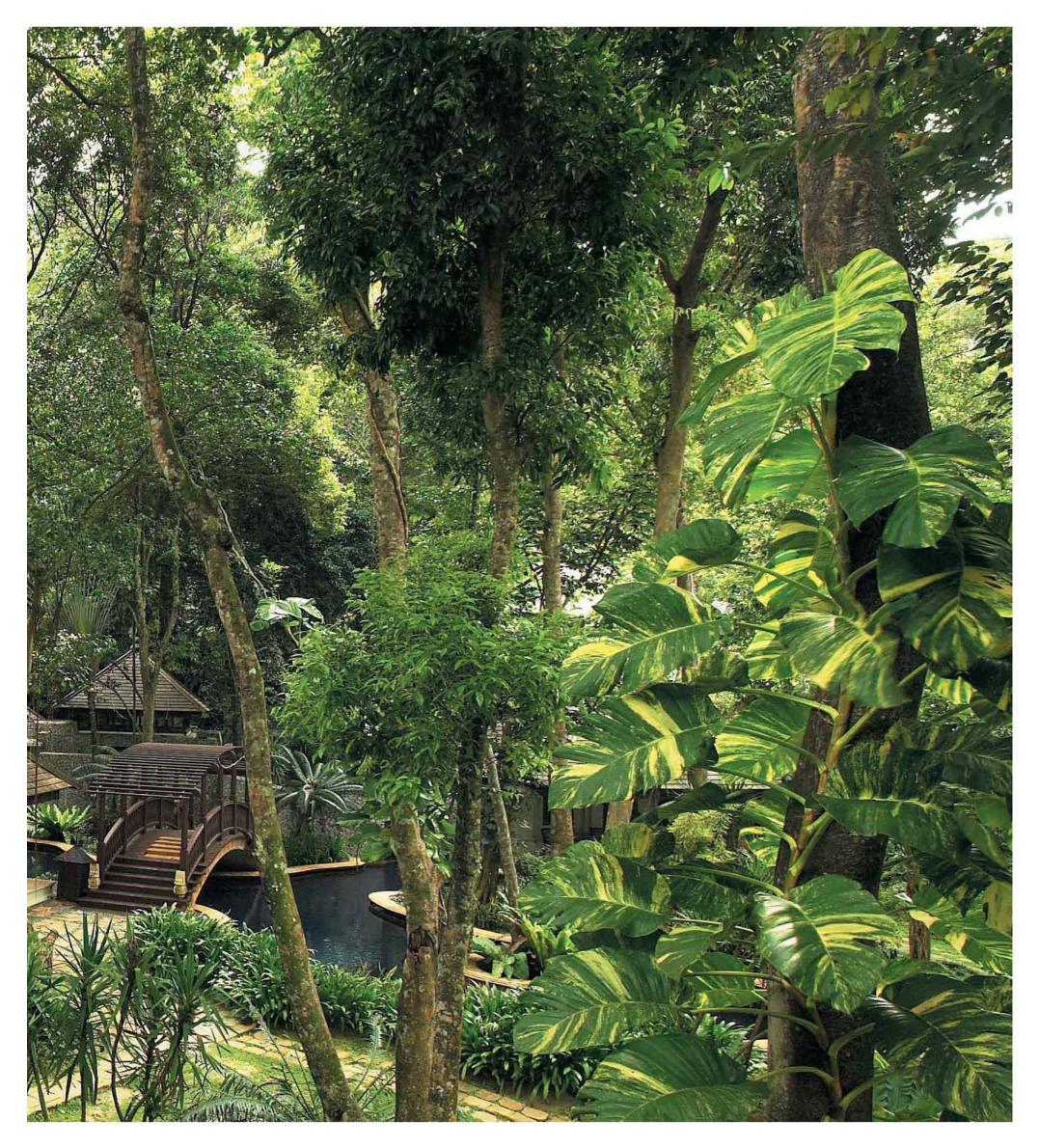
As the pond's original free-flow contours had these little 'bays', the architects cleverly placed a bungalow bedroom on this Estate within the curve of one of them. This particular bungalow bedroom is built with steps leading directly from the sliding glass doors of the bedroom into the swimming pool, bypassing all the other areas of the building. There is nothing quite like

a jump into the pool first thing in the morning to instantly rouse the senses and get the adrenaline started for the rest of the day. The 'jump' becomes less metaphorical and more a reality when the swimming pool is located almost literally next to one's bed. That, among other attractions, is what sets Estate 2 apart from the other Estates.

The other two bungalow bedrooms on this property have outdoor jacuzzis that open to the sky and are located within their own enclosed private gardens so that even taking a bath is having communion with nature.

To accent the *genius loci* of this natural fresh water pool further, a curved walking bridge of solid chengal bisects it. At the side of this bridge, one of the Estate's singular treats presents itself.









Top left

Prehistoric Cycas siamensis growing by the bridge on Estate 2. This species was reported by botanists in 1936 to be found in "Burma, Indo China, Siam and just into the northern parts of British Malaya".

Bottom left:

The unusual sight of female sporophylls and developing seeds of the *Cycas siamensis* on Estate 2.

LIVING AMONG LIVING FOSSILS

It is not often that one can come face to face with a rare, live relic that flourished 150 million years ago during the Mesozoic Era. Called cycads, these ancient plants can generate their own heat, produce motile sperm and are capable of changing their sex from male to female and vice versa. Although many people mistake them for palms or ferns, the prehistoric cycads are in a completely different category.

Examples of cycad fossils in Mesozoic rocks have been found in the likes of Alaska, Antarctica, Europe, Greenland and the United Kingdom, as the prevailing climate of these places was considerably warmer during that period. Because of their great antiquity, cycads have been described as living fossils. They have been traced back to a time when dinosaurs roamed the earth. However, unlike the dinosaurs that have no direct living descendants, cycads can still be found growing in warmer regions of the world. This beachfront Estate boasts not one but three specimens of these living fossils.

A plant that generates its own warmth

A female *Cycas siamensis* or limestone cycad is found just beside the end of this Estate's wooden bridge. For a plant with such a prestigious lineage, the *Cycas siamensis* is an unassuming, relatively short, palm-like plant with a cylindrical base. The female of the species sports seed cones from which tiny fruits are formed.

Botanists note that the production of heat is very rare in the plant kingdom. This phenomenon has recently been investigated more closely and found to occur in both male and female cones in members of all cycad genera. Temperatures measured in cones ranged from 1 degree Celsius to 17 degrees Celsius above ambient, with the largest cones producing the most heat.

These male cycad plants produce motile sperm i.e. sperm that are capable of moving on their own.

Bottom right:

A cycad's cone generates its own warmth, ranging from 1 degree to 17 degrees Celsius above ambient temperature.

The Cycas rumphii's "extremely tender, uncurled leaves are eaten by the Malays ... said to taste like cabbage, or ... asparagus," noted the famous botanist Burkill in 1966.

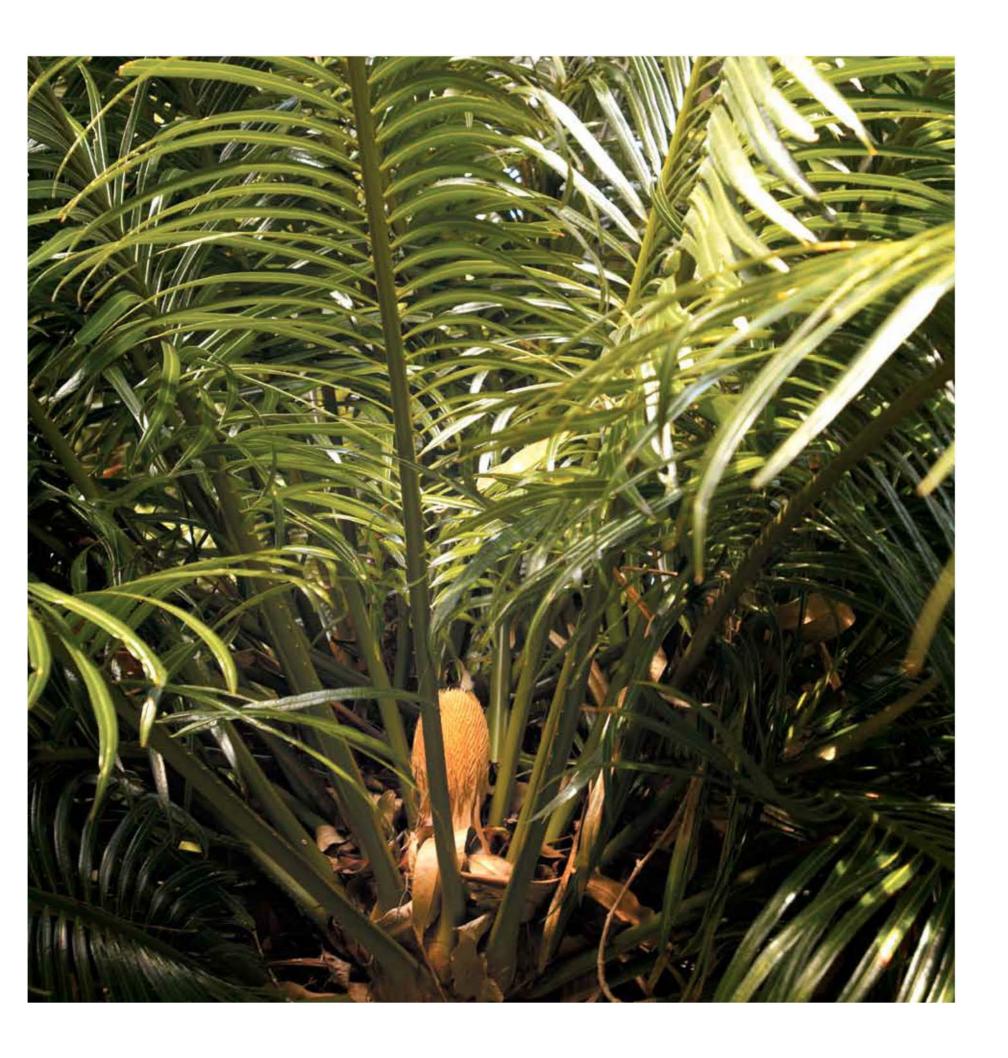


A taller, more regal cycad, a male Cycas rumphii (locally known as paku haji) which is a coastal species, grows near the entrance to one of Estate 2's bungalow bedrooms. It is distinguished by a large, red, bullet-shaped pollen cone among the fronds. A third cycad is also within easy sight from the pool. Until this plant reaches the sexual reproduction stage, it is not visually possible to determine its sex.

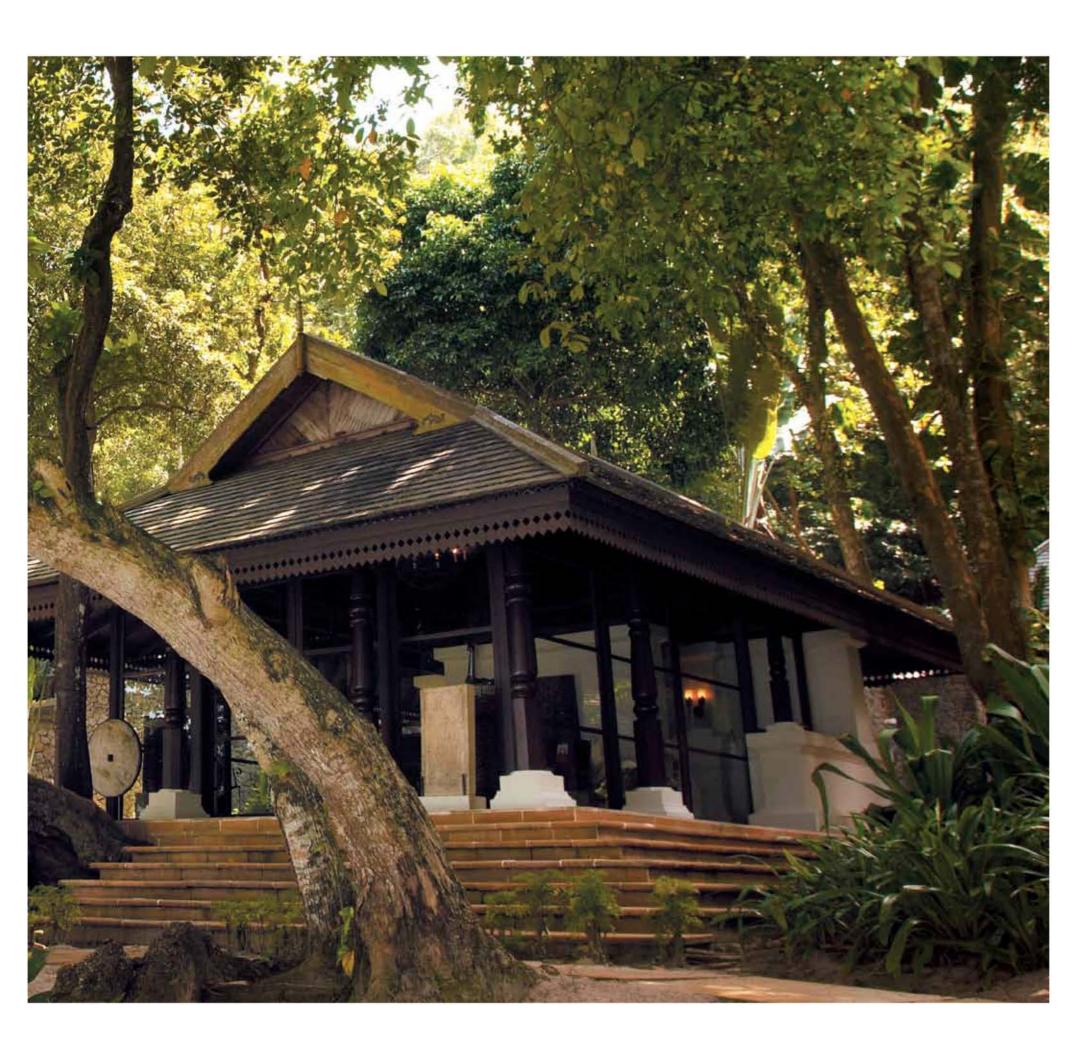
A unique feature of male cycads is the production of motile sperm, which is unusual for plants. Called spermatozoids, cycad sperm were discovered in 1896. Under a microscope, the spermatozoid of this plant is roughly spherical in shape with two or more spiral bands which bear numerous cilia along the length (up to 40,000 cilia for certain species of cycad spermatozoid). The pulsating beat of the cilia enables it to swim towards the ovule to effect fertilisation.

Cycads are dioecious, which means they are either male or female, but they are capable of altering their own sex. Sex changes in unisexual plants are considered extremely rare occurrences. It is, however, well documented among cycads. Worldwide, approximately 19 cases of spontaneous sex change have been reported in cycads that have been under close observation for a number of years.











Opposite: Estate 2's bamboo (Bambusa vulgaris) can grow 12 feet in height within a fortnight.

Top right:
Bamboo is technically a grass, but one that grows

Bottom right:
Botanist I.H. Burkill noted that the shoots of this bamboo are eaten cooked and pickled.



Bamboo does not commonly grow near salt-water beaches, so the existence of three clumps of native bamboo (*Bambusa vulgaris*) growing naturally in separate spots over the swimming pool is noteworthy. Their presence here can be attributed to the original fresh water pond on this property.

From a sub-family of grasses, bamboo is very fast growing (ever noticed how often one's lawn needs mowing?) and is used extensively for cooking utensils, furniture, dim sum baskets, musical instruments and blinds like those in the bungalow bedrooms of Estate 2. Even in its natural state in this property, the bamboo is a 'musical' instrument in the way it 'hums' when the sea breeze caresses it. Because of its rapid growth, durability, flexibility and elegance, bamboo has vast potential as a more ecologically sustainable alternative to timber, plastics and metal.

As far as is possible, all materials used in the construction of Estate 2 are totally natural, down to the smallest details. The drains are covered with slabs of natural stone that have a star pattern cut into them for efficient draining of water. Dead trees are sawn into simple, circular plates which are then embedded in the ground to serve as pathways. When in the course of time these slabs are reclaimed by the earth, they are easily replaced by 'new' ones in the natural cycle of life.

As it is sung in the psalms, "The earth is the Lord's and the fullness thereof." By conserving nature through architecture, YTL hopes to join its work to Heaven's gift.







