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SWIMMING POOLS • RAINWATER HARVESTING

# SWIMMING POOLS

SAMIR MATHUR

Luca Invernizzi, Tettoni / The Tropical Garden

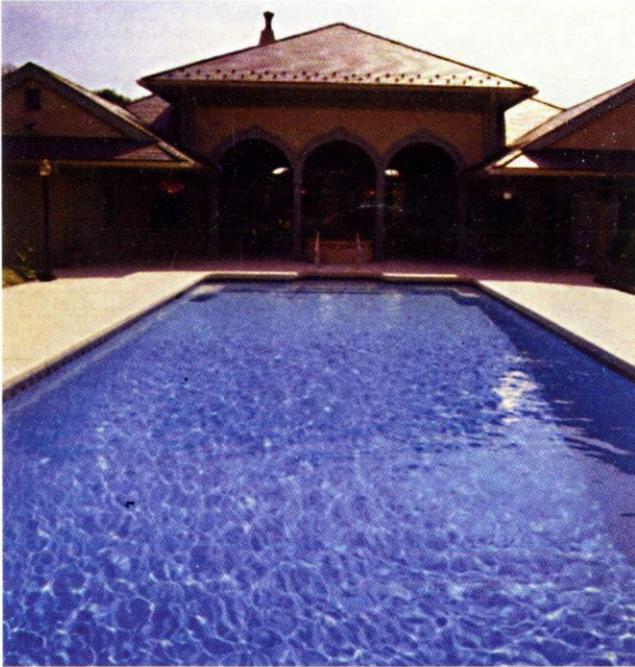


A SWIMMING POOL IN A HILL-TOP GARDEN WITH A THATCHED ROOF SITOUT AND PALMS GIVING IT A TROPICAL FEEL



*he presence of water has traditionally been a sign of plenty, as also a metaphor for quenching of material desires. Physical contact with water has been found to be therapeutic. The value of pools is an important link in the relationship between humans and nature. Swimming pools, even for the nonuser are a source of visual delight, and convey a sense of association to the natural landscape. Many questions arise relating to swimming pools, both in terms of their design and utility... What makes a pool safe and easy to use? What are the points to bear in mind while locating and building a swimming pool, especially in India? Pools are much more than just an element of visual relief in the landscape, and require careful handling if they are to fulfill their functional requirements...*

Anthony & Sylvan Pools



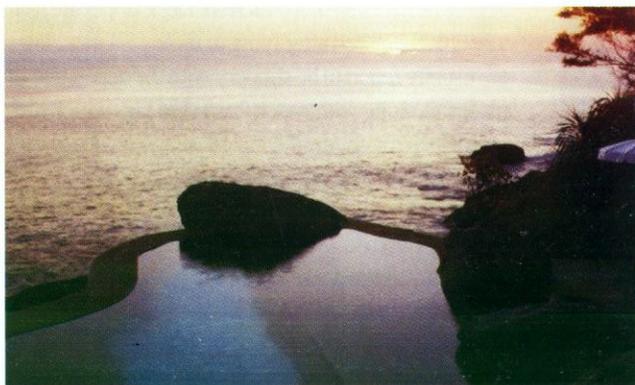
ONE OF THE MOST COMMON SHAPED POOL- THE RECTANGULAR SHAPE

Anthony & Sylvan Pools



A FREEFORM SHAPED POOL

Luca Invernizzi Tettoni / The Tropical Garden



A SALT-WATER FREEFORM POOL IN PHUKET, BUILT IN THE ROCKS OVERLOOKING THE ANDAMAN SEA

Design of pools spans many interrelated fields such as site planning, framing a program of requirements as to its size and geometry, civil, plumbing, electrical engineering and horticulture. The reason why images of some pools are more appealing than others is due to a combination of factors relating to the pool location, design and construction. Safety considerations play a major role in design as a whole as well as of all its components. The key is to remember that pools are usually designed to be viewed as well as used and as in art, principles of light and proportion play a significant role in making them visually attractive.

**SITE PLANNING CONSIDERATIONS**  
site planning considerations

The relationship of landscape and built form, especially with respect to the functional requirements, needs detailed examination. A key notion in the location of swimming pools is a semblance of privacy, especially in pools which have multiple family units using them, whether in a group housing or a sports complex or hotel. In residential housing clusters, swimming pools are located away from the main circulation areas, though proximity to central open spaces is usually desired for ease of access. In single-family residences, the pool may take on an additional dimension of being the focus of social and party activity.

**DESIGN CONSIDERATIONS**  
design considerations

The following are components of a swimming pool which are of interest to a designer:

- Shell, water proofing and tiling.
- Water recirculation system including inlets, outlets and pumping system.
- Deck.
- Planting around the pool.
- Lighting inside and around the pool.

**Shape**  
shape

Rectangular and freeform shaped pools are the most common. Of these, rectangular pools of proportion 1:2 between the sides are most widely used.

Freeform pools with trees and planting, especially those facing the sea, enhance viewing pleasure like no other pool. Though, these pools are most challenging to build and maintain, these are often used in residential situations and in resorts to contrast with stark and rigid geometry of the architecture. Considerations of bottom drainage, water supply and access to center are difficult in these pools and these have been prone to structural failure, possibly due to the uneven distribution of stresses.

A perfect circular form is not used often, as swimming of lengths is not possible.

Anthony & Sylvan Pools



STEPPED DECK AROUND KIDS' POOL ADD INTEREST TO THE OTHERWISE SIMPLE SHAPE OF THE MAIN POOL

Steve W. Marley / Sunset Swimming Pools



EVERGREEN SHRUBS ARE OFTEN PLANTED ALONG THE POOL FOR SCREENING AND A SENSE OF ENCLOSURE

There are functional divisions in the swimming pool relating to the depth of water. These are used to characterize the usability of the pools such as 'shallow end' (for nonswimmers), 'deep end' and 'clear length' (for swimmers). Other elements such as shower, foot-wash and the deck are integral to the layout and should be in physical proximity in sequence of use when approaching the pool.

## DESIGN OF POOL DECKS

### design of pool decks

It is assumed that at given time two thirds of the users are not inside the pool. Thus, the deck size should be at least the same as the surface area of water. Deck chairs about seven feet long are placed on pool deck with appropriate space in between and enough space to walk around them. Dimensions of the pool deck should follow from this. The pool deck slopes away from the pool. The edge grating is at level and handhold slopes inwards to prevent a mixing of rainwater or muddy water with the pool water. Chlorinated water from the pool is harmful for plants around, and the dimensions of the pool deck should be wide enough for excess water droplets falling off from the swimmer's body.

## Finishes

### finishes

Pool deck material should be impervious to water or with low water absorption. Thus, common stone like sandstone is not recommended as it get stained. Stone on deck should be non-flaky that does not pierce the feet, as skin is soft after swimming and more susceptible to damage. This is the reason timber or exposed aggregate decks are not preferred. Deck stones are usually chisel dressed after lying to remove flakes. Tiles are usually found to be slippery with the deposition of materials along with water. Anti-skid tiles which provide a grip for children while running are best to use. These should be non corrodible.

Special heated decks in hilly areas require piping to be underplayed the deck. The stone paving of the deck should be such so as to allow the heat to penetrate through.

## PLANTING planting

Planting around swimming pools play a major role in enhancement of the visual qualities of water. The principles behind planting for swimming pools serve two conflicting requirements:

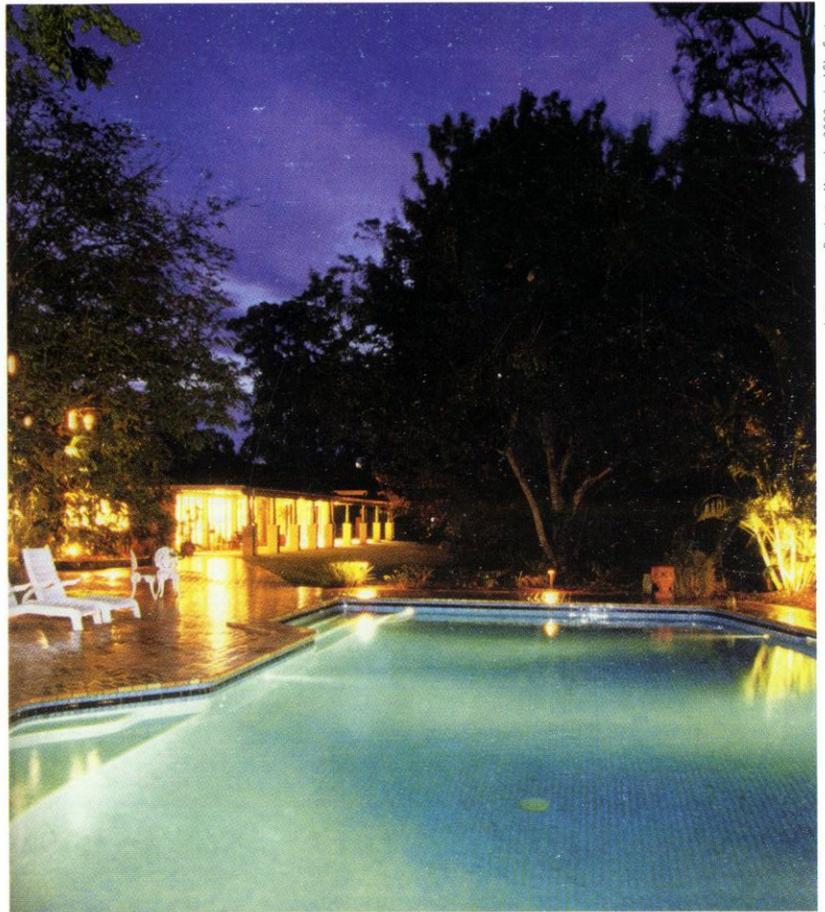
- Privacy and sense of enclosure for the users.
- Spaciousness and visual delight as often the pools are located in proximity to other built up structures such as change rooms, pavilions, or habitable rooms.

Planting with shrubs and ground covers is usually most appropriate from the maintenance aspect. Plants such as *Lantana sellowiana*, *Chlorophytum comosum* and *Dracaena reflexa* are often used for this purpose. Large trees are best avoided in the near vicinity for their leaf litter and also as they block sunlight. Even evergreen trees are best avoided as they shed a proportion of their leaves during the year.

Shrub beds fulfill the function of providing an edge and privacy to the pool environs. Evergreen shrubs at the periphery to provide screening and the use of bold textured or flowering plants as accents are preferable. Plants such as *Furcraea watsoniana*, *Cycas revoluta* and *Cycas circinalis*, varieties of bamboos and yuccas are often proposed. In coastal areas, bromeliads are also used to great effect. Bushy flowering shrubs such as Hibiscus varieties, *Hamelia patens*, Bauhinia varieties, Tecomas and similar species are used to provide both screening as well as floral displays. Ornamental evergreens such as *Ficus benjamina*, *Ficus nuda*, *Duranta plumieri* and *Schefflera arboricola* are used for screening and enclosure.

Poolside lawns add value to a pool, both through increased use and through better visual perception. However, strips of grass reaching up till the pool is not advisable, as these are difficult to maintain due to constant wetting with chlorinated water.

*Technical details and regulations of pool design shall be discussed in our upcoming issues.*



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Samir Mathur did his Masters in Landscape Architecture from the University of Massachusetts, Amherst, USA. Presently, he is Assistant Professor in the Department of Landscape Architecture in School of Planning and Architecture, New Delhi.  
>e-mail: mathur@vsnl.com

