

Landscape Architects and Tree Management

園境師與樹木管理

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Landscape Architects' Mission 園境師的任務

To improve the quality of environment by using ecological approach in planning and design
運用生態規劃和設計方法去改善環境



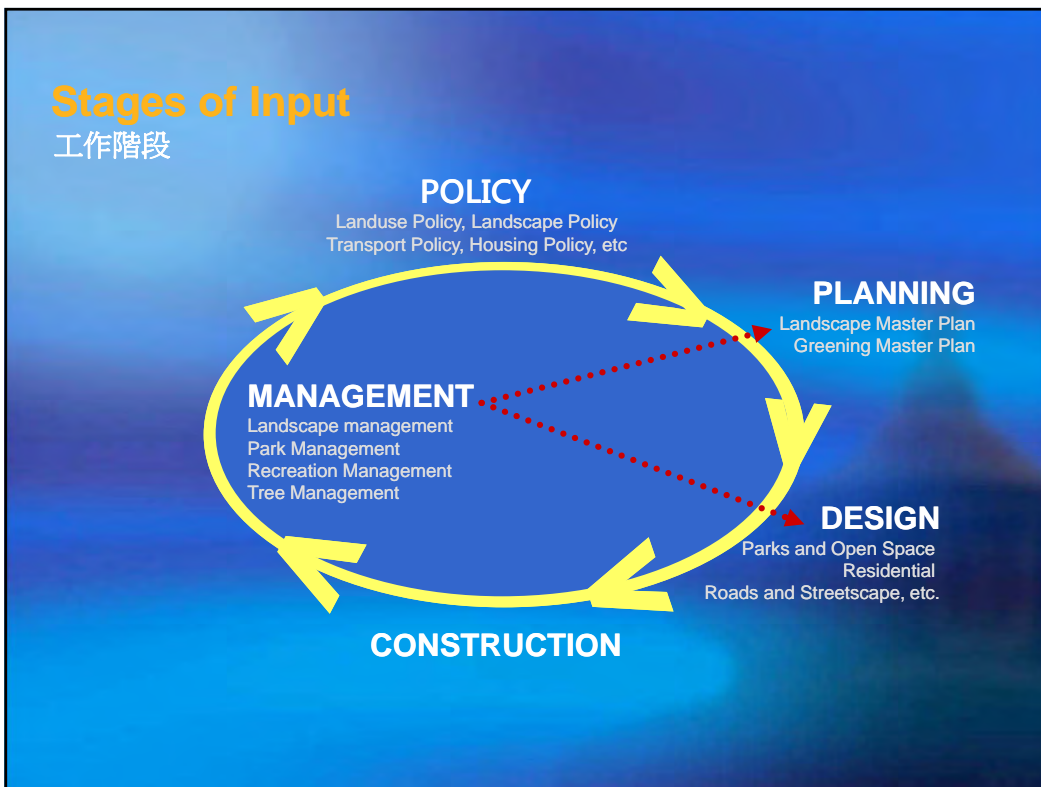
Landscape Architect's Scope of Services

園境師的服務範圍



Stages of Input

工作階段



The Functional Uses of Plant Materials

植物的功能和使用

Architectural Uses

建築設計

Engineering Uses

工程設計

Climate Control

氣候調控

Esthetic Uses

視覺美感

Other Uses

其他用途

Architectural Uses of Plants

建築設計用途

1. SPACE ARTICULATION

2. SCREENING

3. PRIVACY CONTROL

4. PROGRESSIVE REALIZATION



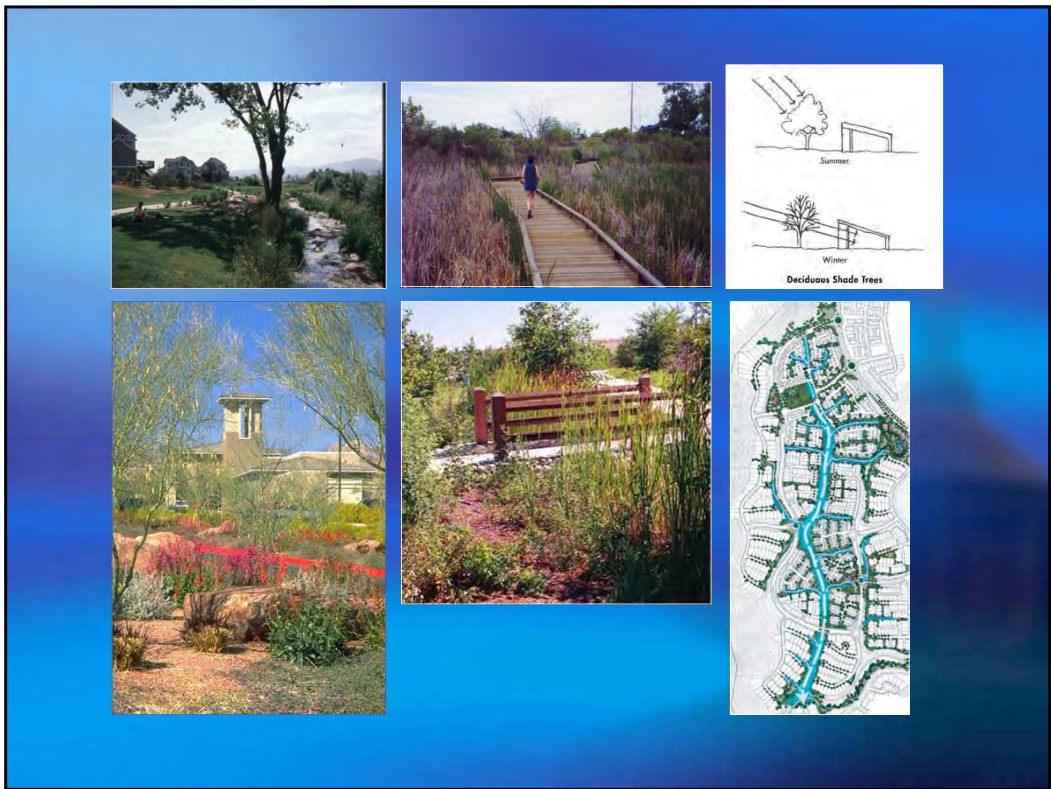


Engineering Uses of Plants

工程設計用途

1. EROSION CONTROL
2. ACOUSTICAL CONTROL
3. ATMOSHERIC PURIFICATION
4. TRAFFIC CONTROL
5. GLARE AND REFLECTION CONTROL





Climatological Uses of plants

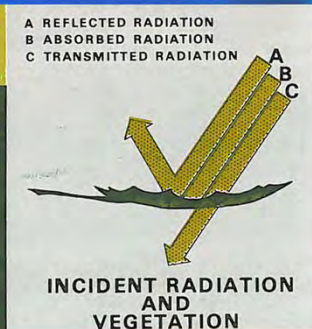
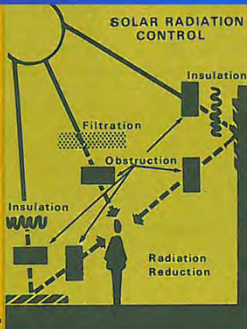
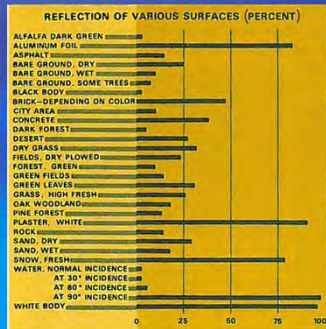
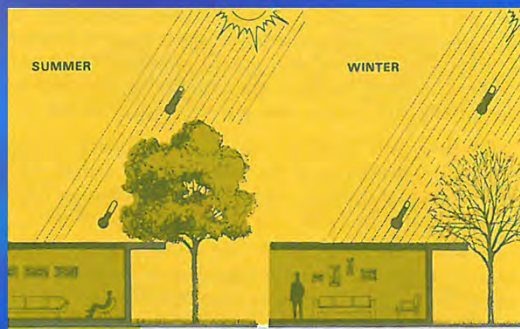
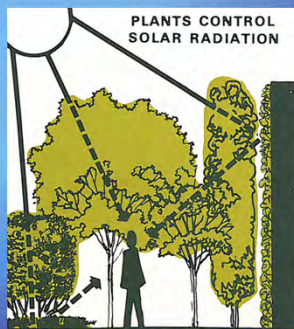
氣候調控用途

1.SOLAR RADIATION

2. WIND CONTROL

3. PRECIPITATION CONTROL

4.TEMPERATURE CONTROL



Esthetic Uses of Plants

視覺美觀用途

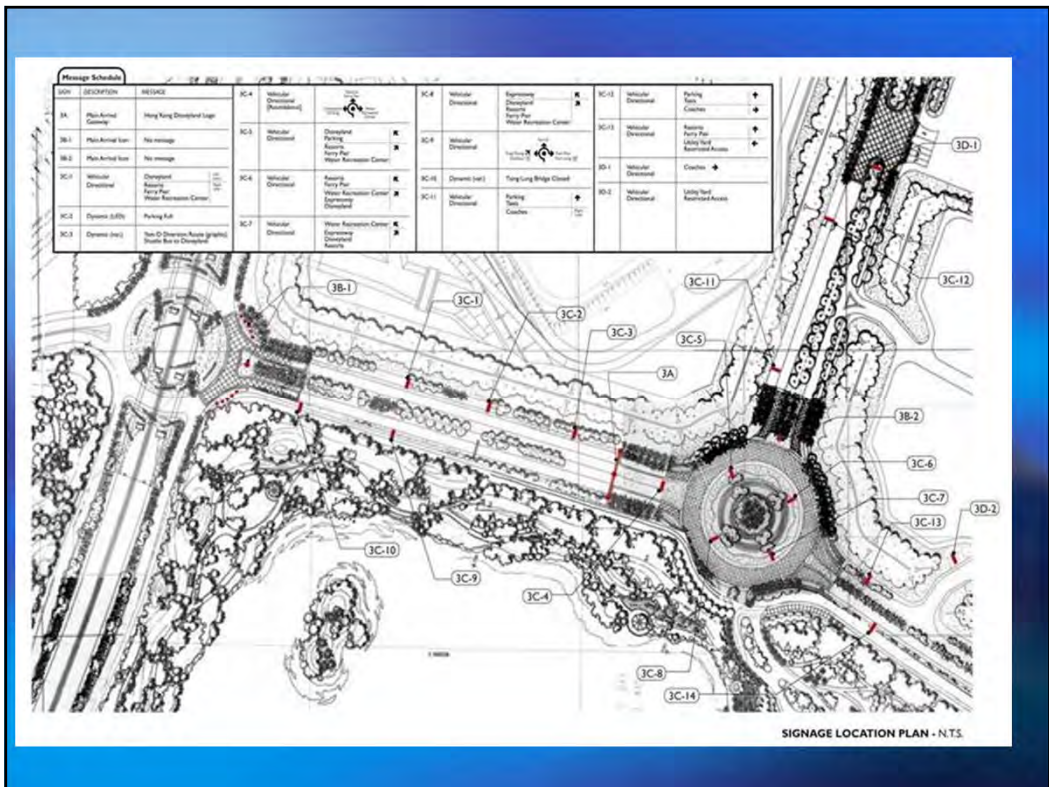
Visual Controllers
Complementors
Attractors
Unifiers
Emphasizers
Diverters
Softeners
Acknowledgers
Articulators

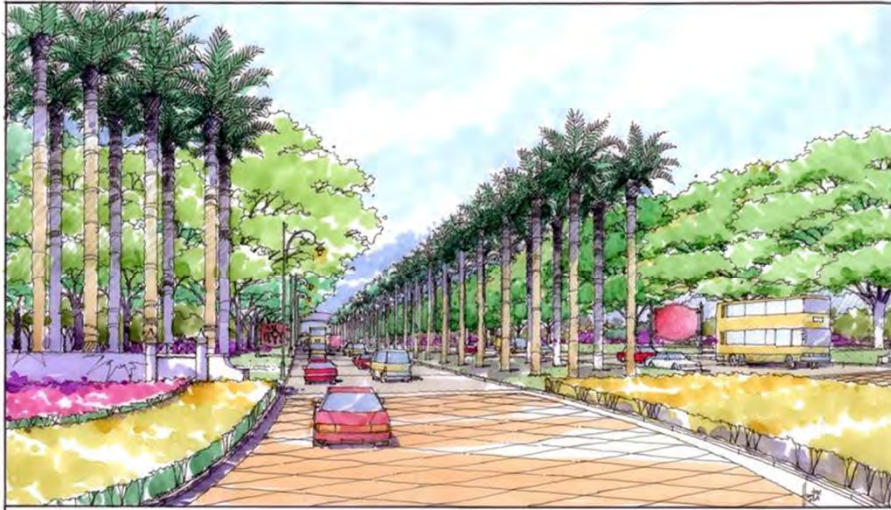


Multi – disciplinary Design Team

- Landscape Architects
- Engineers, Architect
- Horticulturist
- Quantity Surveyors







VIEW AT ENTRY ROAD LOOKING SOUTH

SECTION A



ELEVATION ENTRY FRONTVIEW



PLAN



Landscape Feature - Details

ENTRY WATER FEATURE

OPTION 1 CIRCULAR ROUNDABOUT

Stone Face Columns And Bridge Structure To Echo With The Countryside Character And Act As The 'First Arrival Or Last' Exit Gate From The Theme Park

Curve Walls Radiate From Roundabout To Anchor All The Traffic Junctions

Low Stone Wall To Reinforce The Circular Pattern And Accentuate The Transition Of Countryside / Naturalistic Characters To A Formal Arrangement (Frontage Road) And Related Resort Road

Stone Face Ground Walls In Curve Pattern To Accentuate The Roundabout And Relate To The Bridge Structure. Green Level Uplight Will Be Adopted To Highlight The Curve Walls And Create A Light Wash To The Columns

Curve Mound Will Be Created To Lift The Ground Plane For Strengthening The Relationship Of The Bridge Structure And Landscape

Curve Walls Radiate From Roundabout To Anchor All The Traffic Junctions

Oval Shape Count To Define The Spatial Character Of Entry Road And Anchor The Junction

Low Stone Wall To Reinforce The Circular Pattern And Accentuate The Transition Of Countryside / Naturalistic Characters To A Formal Arrangement (Frontage Road) And Related Resort Road

Lawn and Shrubs Planted to Edge of Roundabout to Cater for Sight Line Requirement

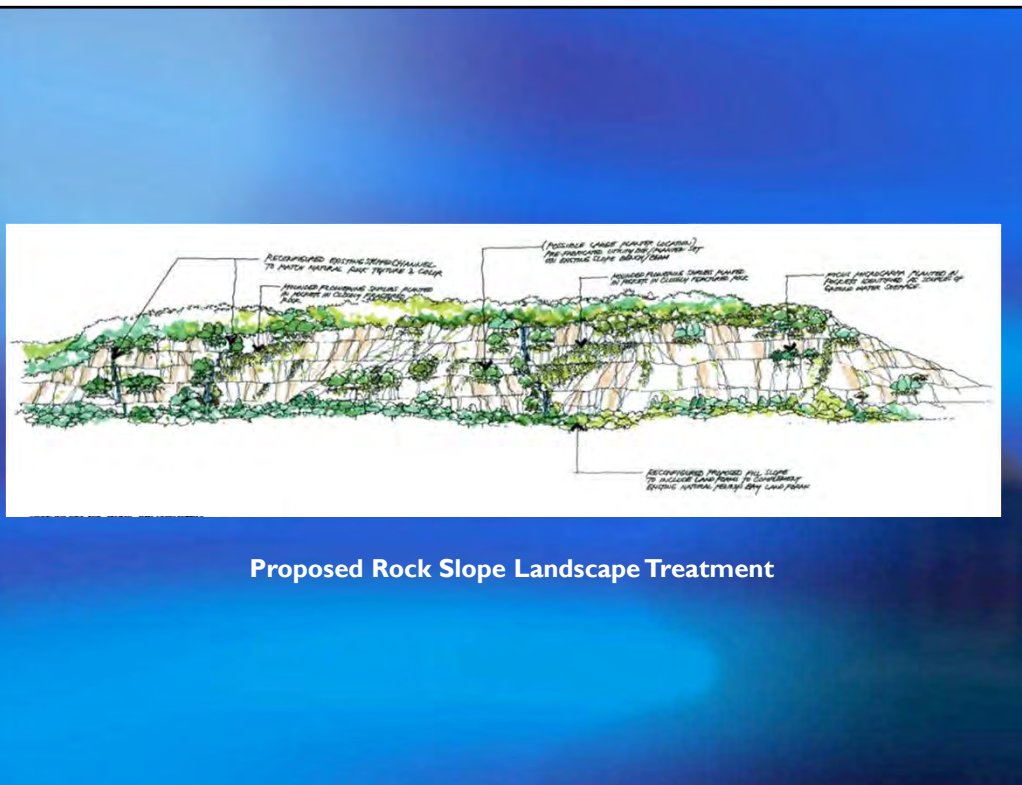
Cascade Fountain With Bubble Jet And Night Light Effect To Create A Strong Night Scene With Indirect Lighting For Palm Grove And Water Feature

Palm Group Avenue to Create an Arrival/Highway Effect with Strong Sense of Tropical Character

OPTION 2



CKWLR ROUNDABOUT



Proposed Rock Slope Landscape Treatment







Management and Maintenance Manual

Ficus microcarpa (*F. Retusa*) (榕菜榕)
Chinese Banyan



Botanical Description

Habit: broad-oval
Size: up to 30 m tall; up to 20m spread
Bark: grey brown
Leaves: evergreen, simple, oval-shaped broad ovate to ovate elliptic; barely elongated, base rounded
Flowers: inconspicuous, year-round
Fruit: syconium; sessile fig
Native habitat: Malay Peninsula to Borneo
Fun Facts: This tree produces curtains of aerial roots. The flower requires a wasp, *Euprestina verticillata*, to reproduce and develops inside the fruiting body.

Landscape Value

Like its relative *Ficus altissima*, *Ficus microcarpa* is planted for its ornamental foliage and ability to provide shade in the infrastructure development. It is planted with *Barringtonia*, *Cassia*, *Delonix*, *Elaeocarpus*, *Erythrina*, *Lagerstroemia*, and *Plumeria* on the Lantau Express Highway, Penny's Bay Highway, Fantasy Road, and Magic Road (West Resort Road). On Rock Catcher Berm and the berms along Magic Road(Entry Road) and Fantasy Road, it is located among *Alstonia*, *Chromolaena*, *Mangifera*, and *Melaleuca*. *Ficus microcarpa* can be found on the SIMAR slopes of the Penny's Bay Highway and on the hillsides of the Mong Tung Hang Catchwater Drainage Channel. It is also grown in the planting of Sewage Pumping Station 2. Furthermore, it is placed in the Fengshui Woodland of the Arboretum.

Maintenance Requirements

Ficus microcarpa grows well in part-shade to full sun and in moist, well-drained soil. It must be sheltered from cold winds. Once established, the plant is relatively low maintenance and also salt tolerant.

Management and Maintenance Manual

Botanical Description

Habit: single trunk
Size: 12 m tall
Trunk: semi-rough textured
Fronds: palmate, toothed basally undivided cen up to 2 m long; spines pendulous
Flowers: yellow-green; spring/early summer
Fruit: oval, blue green
Native habitat: Southern Japan and China
Fun Fact: The leaves are used to make fans and hats.

Landscape Value

Livistona chinensis is used as a feature palm within the infrastructure development. It is located on the central island of the Inspiration Lake Recreation Center with *Delonix* and *Elaeis*.

Maintenance Requirements

Livistona chinensis will tolerate full sun; however, it will produce greener and more vigorous foliage in partial shade. It grows well in moist, well-drained soil. Old fronds tend to fall off by themselves and require little or no pruning.

Livistona chinensis may be attacked by scale insects. Furthermore, pay attention to lethal yellowing disease associated with this palm.

Livistona chinensis (蒲葵)
Chinese Fan Palm



Management and Maintenance Manual

Hibiscus rosa-sinensis (大红花)
Chinese Hibiscus



Botanical Description

Habit: vase shape
Size: 2.5m in cultivation, up to 5m; up to 1m spread
Branches: not showy; multi-trunked
Leaves: evergreen; glossy; alternate; oval-shaped; serrated
Flowers: conspicuous; red; year-round flowering
Fruit: not showy; oval
Native habitat: Tropical Asia
Fun Facts: It is the country flower of Malaysia due to its spectacular and colorful bloom.

Landscape Value

Hibiscus rosa-sinensis creates a bold effect with its medium-textured, glossy dark green leaves and vibrantly-colored, four to eight-inch-wide, showy flowers, produced throughout the year. It can be widely found on North Lantau Highway, Penny's Bay Highway, Fantasy Road, Magic Road (West Resort Road) and Inspiration Lake.

Maintenance Requirements

Hibiscus rosa-sinensis grows best in well-drained compost consisting of peat moss, loam and sand. It needs full sun to partial shade with intermediate to warm temperatures. Water it freely during the growing season and fertilize it twice monthly with a balanced fertilizer from April through September. To keep mature plant growing vigorously, prune out about 1/3 of the old wood in spring. Pinching out tips of stems in spring and summer can increase flower production.

Management and Maintenance Manual

Maintenance Matrix

Plant Group	January	February	March	April	May	June	July	August	September	October	November	December	Comments
Tree	SS		F	P				SS		F	P		W, M, S, DR, WC, PD, R as necessary
Palm	SS		F					SS		F			W, M, P, S, DR, WC, PD, R as necessary
Shrub	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Shrub	SS	R	F	R	WC	P	R	WC	R	F	R		W, M, DR, WC, PD, R as necessary
Groundcover	SS		F	P				SS		F	P		W, M, DR, WC, PD, R as necessary
Turf Grass	SS	R	R	R	R	R	R	SS	R	R	GC	R	W, DR, WC, PD, RS as necessary GC biweekly
	GC	WC	GC	GC	GC	GC	GC	GC	F	WC	GC	GC	
Vine	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Angiate Plant				P									DR, PD, R as necessary
Woodland Plant	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

A - Aeration
CB - Covered Barrier
D - Division
E - Edging
F - Fertilizing
GC - Grits Cutting Mowing
M - Mulching
N/A - Not Applicable
P - Pruning
PD - Pest & Disease Control
R - Replacement
RS - Reseeding
S - Staking
SS - Soil Sampling
T - Training
W - Weeding
WC - Weed Control

* No entry - Not applicable
F - should be based on need determined by testing not a predetermined schedule with exception of turf
SS - should be based on site condition and operational need
R - Replacement of plant materials to a provisional stem on need basis

Landscape Management Team

- **Qualified Landscape Managers**
- **Certified Water Managers and Water Auditor experts**
- **Certified Arborists**
- **Certified Tree Workers**
- **Turf Care Experts**
- **Soil Scientist**
- **Tree Biologist**
- **Plant Pathologist; Mycologist; Bacteriologist; Virologist**
- **Entomologist; Pesticide Specialist; Integrated Pest Management Specialist**

Conclusion

1. **Successful Planting requires good design (30%) and maintenance (70%)**
2. **Establish a landscape policy for Hong Kong**
3. **Adopt planning parameters for tree planting in urban area i.e. greening ratio, planting reserves, tree protection zones...etc**
4. **Designers and managers work together to achieve a common goal**
5. **Establish a professional landscape management team for the whole district**
6. **Introduce licensing system for practitioners**
7. **Establish professional landscape management course in local University**
8. **Continued education and research in tree management**



Thank You 謝謝！