

LIST OF PLATES

Plate No.		Page No.
1	Visual Importance	110
2	Natural Solution Versus Artificial Solution	110
3	Upgrading of Existing Slopes	110
4	Unity and Coherence (Good and Bad Practice)	111
5	Proportion and Scale (Good and Bad Practice)	112
6	Pattern and Texture	113
7	Rhythm and Complexity	113
8	Colour and Albedo	113
9	Berm Planters	113
10	Bad Drainage Practice	114
11	Good Drainage Practice	115
12	Soft Slope Treatment	116
13	Hard Slope Treatment	119
14	Mixed Slope Treatment	126



Plate 1 - Visual Importance

Note: Slopes that are visible to very many people demand particular care in their design.



Plate 2 - Natural Solution Versus Artificial Solution

Note: The photograph is of an engineered rock slope which has achieved a 'natural' look. People generally find the natural look acceptable in almost any location.



(a)



(b)

Plate 3 - Upgrading of Existing Slopes (Note: Upgrading works will generally require the aesthetic design to be fitted into an established environmental setting.)



(a) Planting at the toe, top of retaining wall and soil slopes above successfully create a unified appearance for the whole slope and help to blend it into the surrounding landscape



(b) Bad practice - the juxtaposition of materials of different visual characteristics in this case shotcrete and gabions



(a) The creative use of a series of small terrace reduces the apparent size and scale of the slope and allows introduction of valuable greenery into the surrounding landscape



(b) Bad practice - this slope has almost no features dividing it up resulting in a scale out of proportion with its setting



Plate 6 - Pattern and Texture

Note: An excellent design solution which employs techniques in a co-ordinated manner, resulting in a composition that has both a good pattern and texture.



Plate 7 - Rhythm and Complexity

Note: A good solution which uses two scales of ribbing to provide just sufficient complexity, together with a wave pattern detail, creating a uniform rhythm.



Plate 8 - Colour and Albedo

Note: The red-oxide colour of the shotcrete slope is a 'complementary' colour to the greens elsewhere in the landscape providing a better 'fit' with the surroundings.



Plate 9 - Berm Planters

Note: Where berms are parts of the design they provide the opportunity for the creation of planters in which a variety of vegetation may be established.



(a) Slope Infrastructure and Drainage Features

Note: Drainage features and slope infrastructure should be coordinated into the overall design of a slope. Here they merely intrude upon the streetscape.



(b) “Fortress” architecture, which predominates in many of Hong Kong’s slope drainage layouts



(c) An opportunity lost. Naturalistic drainage pattern has been effected but the use of stark white concrete has meant that it clashes rather than integrates with the landscape



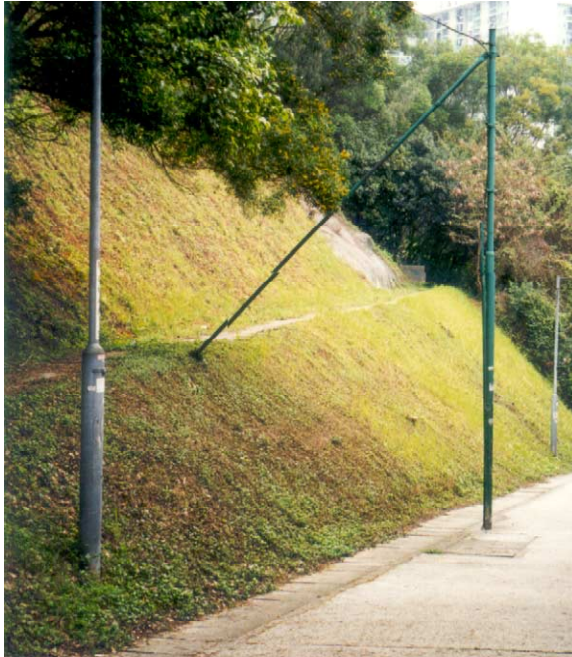
(a) Use of pigments to tone with adjacent rock features helps to integrate the drainage infrastructure



From UK Dept. of Transport 'Good Roads Guide' Dec. 1992

(b) Good practice. Concrete within the outcrops has been clad in local stone. M6 Motorway UK

Plate 11 - Good Drainage Practice



(a) Hydroseeding with grass seed on a 45° soil cut slope



(b) Hydroseeding with grass and mixed tree planting on 40° soil cut slope



(c) Self-seeded grasses and groundcover plants on 70° soil cut slope



(d) Blockage of drainage channel by uncontrolled grass growth



(e) Mature hydroseeded grass and tree seed on 50° soil cut slope



(f) Overcrowding of about 10 year old hydroseeded trees



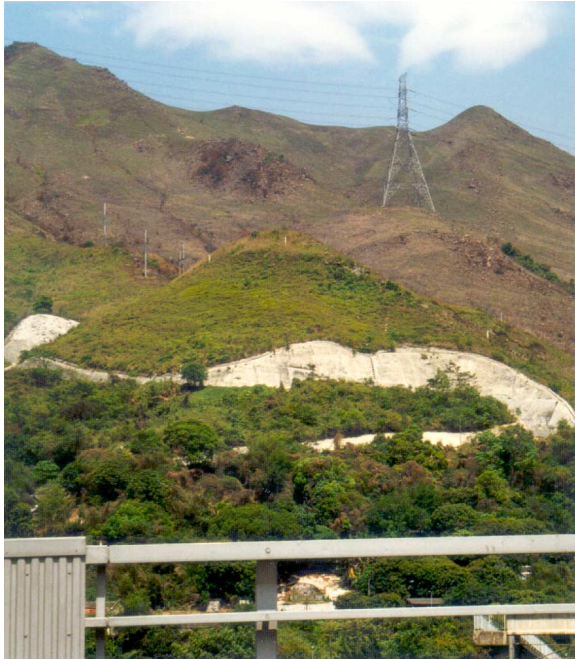
(g) Poor establishment of vegetation on decomposed rock grade IV



(h) Ornamental planting on terraced slope



(i) Grass previously hydroseeded on slope is out competed by local species



(a) Highly visible untreated sprayed concrete slope



(b) Sprayed concrete with colour pigment



(c) Sprayed concrete with naturalistic colouring and patterning



(d) block surface cladding used on fill slope



(e) Contrast between natural vegetation and light grey shotcrete



(f) Dark colouration of the chunam lessens the visual impact



(g) Darker shotcrete and the retention of trees have softened the visual impact



(h) Natural profiles under the pale brown sprayed shotcrete create a pattern which reduces the monotone effect of a single colour.



(i) Masonry block used as infill on rock slope



(j) Large-scale block pattern surface cladding



(k) Raised nail head detail on a hard surfaced slope



(l) Countersunk nail head detail on a hard surfaced slope



(m) Layered rock infill pattern in gabion basket



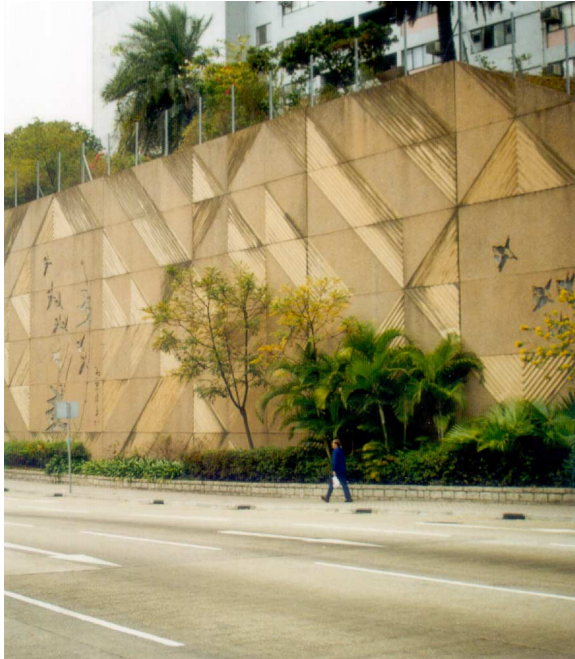
(n) Crib wall



(o) Co-ordinated materials and textures on a retaining wall



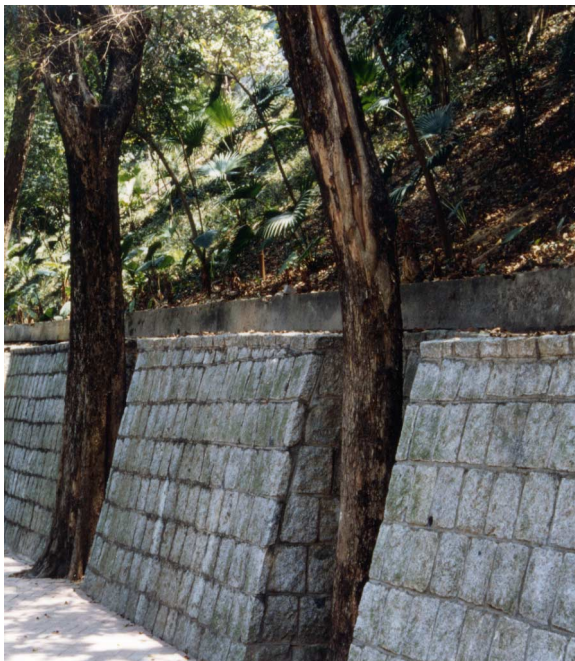
(p) Successful use of vegetation to screen wall



(q) Considered a successful graphic wall design



(r) Visually intrusive rock buttress contrasts with the texture and scale of the slope



(s) Buttresses have been spaced to allow existing trees to be retained and have been faced with granite. Relatively successful overall.



(t) Buttress is coloured to suit landscape and has been given a random stonework finish.



(u) Geometric pattern of anchorage heads gives a reasonable visual appearance



(a) Accumulation of eroded soil behind erosion control mat



(b) Erosion of soil placed above erosion control mat on 45° soil slope



(c) Potential strangulation at base of stem of large plants by erosion control mat



(d) Close-up view of biodegradable erosion control mat (Soil Saver)



(e) Erosion of soil surface through biodegradable erosion control mat



(f) Soil nailed slope with tree cover. Soil nail head partly visible



(g) Soil nail heads exposed beneath recently hydroseeded 45° cut slope



(h) Grillage beams



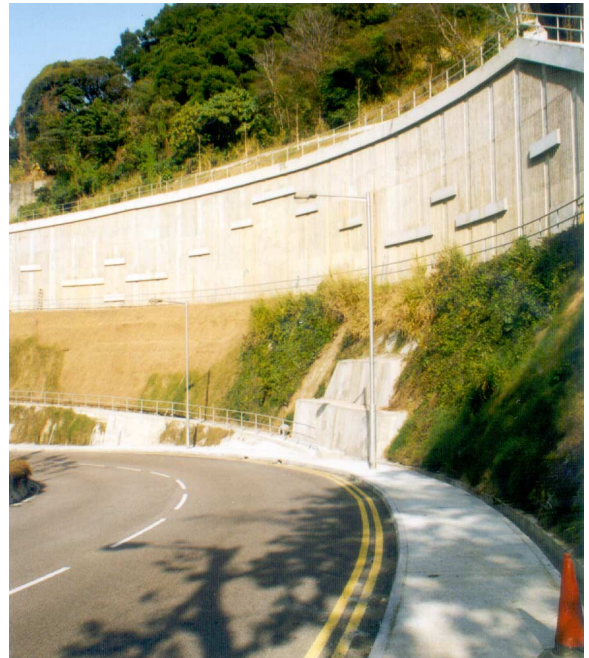
(i) Close-up view of “Grasscrete” surface layer



(j) General view of “Grasscrete” slopes within river channel



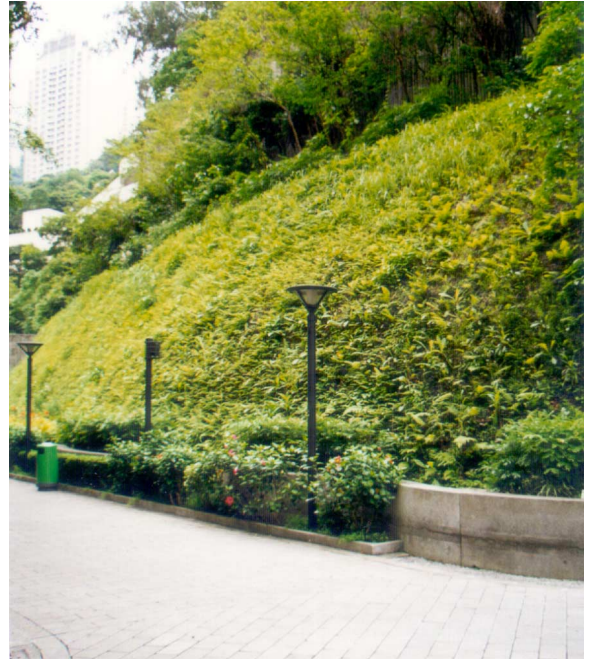
(k) Recently completed slope using “Creat” and General Toyo-Mulching



(l) Recently completed lower grassed slope using partly Strip Toyo-Mulching



(m) Close-up view of “ON” Method



(n) Geogrid slope in Hong Kong Park



(o) Stepped-back reinforced fill structure with facing panels



(p) Berm planters on rock slope



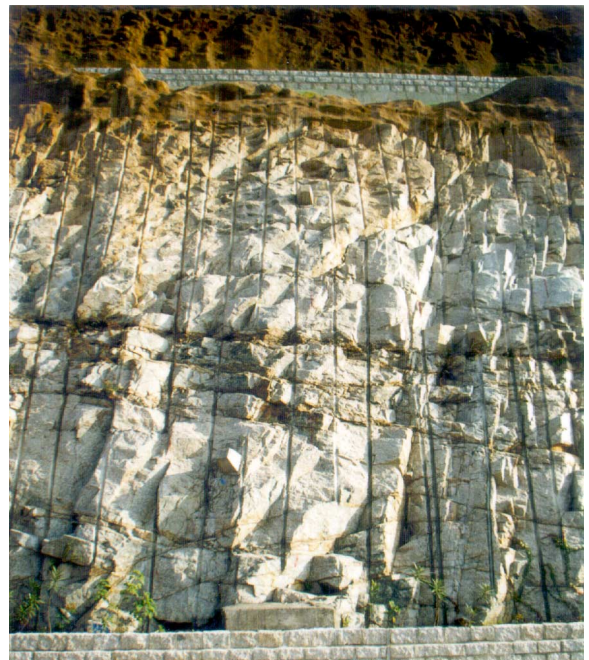
(q) Bamboo screen planted in toe planter



(r) Hanging planter on medium-height retaining wall (right upper side)



(s) Long-range view of vegetated rock slopes



(t) Introduced artificial patterning by pre-split holes in rock slope



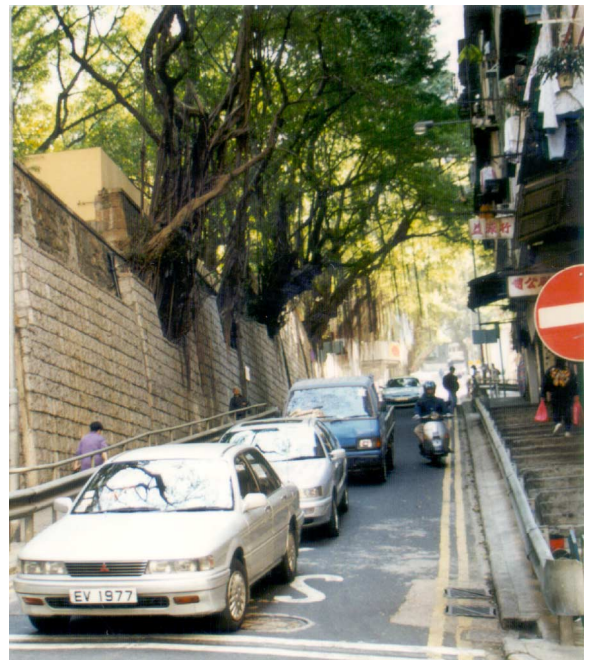
(u) Vegetated rock fill slope above Shek O Quarry



(v) Lam Tei Quarry - An attempt to "green" Lam Tei Quarry by planting of berms between rock slopes with tree whips, shrubs and climbers.



(w) Existing mature and recent tree growth on rock slope



(x) Skin wall upgrading works preserving wall trees



(y) Toe buttress upgrading works preserving wall trees



(z) Effective use of street trees to screen slope



(aa) Tree rings on hard surfaced slope