

NATIONAL CAPITAL DISTRICT INTERIM COMMISSION

REF: 18-26-9

FOR: LAE CITY INTERIM AUTHORITY

SUBJECT: PRINCIPLES OF GOOD PARKS MANAGEMENT

The following principles will apply in general terms to most landscaping projects on public land in towns in Papua New Guinea. They will not apply at every site. No set of rules can replace the judgement of a person sensitive to landscape.

- 1 The most important ingredient of success is to decide what purposes the site in question must achieve. Always analyze the needs of the local community and also of other users from further away. Consider how close are other facilities of similar kind; do not duplicate existing facilities. It is difficult for the builder of a project to meet objectives if he doesn't know what they are.
- 2 Public consultation is essential for any small reserve or project close to a residential area. However, do not follow blindly what the people say. Here are some reasons why the views of the people who come to a meeting are not always reliable:-
 - * A small vocal minority may demand their own views at a meeting, and the silent majority of people are then unwilling to disagree.
 - * The men who express their opinions may not consider the needs of women or children. If men are present, the women may not say what they really think. Children often do not know what is good for them though sometimes they do!
 - * Different provincial groups may have quite different needs and quite different opinions but may not be represented properly at any discussion.
 - * There may be technical factors or cost factors which prevent one of the favoured projects from going ahead.
- 3 Do not use large sites for projects which can be fitted on to small sites nearby. Large sites are more flexible and it is better to keep a large site vacant for some future use which is not yet recognised than to fill it with projects which could easily be fitted on to road sides or smaller parks nearby.
- 4 For similar reasons, when developing a large site, group the facilities near the edge of the reserve, leaving as much as possible available for future development. It is essential to allow flexibility for the authorities who manage the reserve in future to accommodate additional uses.

- 5 Roads should hug the edges of a reserve and not cut through the middle.
- 6 Once a facility is established, it will often be there forever. If a facility is popular, may be a lot of pressure to extend it so when first laying it out, allow room for extension there.
- 7 If there are any remnants of natural vegetation particularly jungle, or mangroves, or bush along the coast or rivers, disturb them as little as possible. Avoid slashing them, burning, grazing stock and disturbing the ground. All of these treatments encourage the invasion of weeds.
- 8 Observe carefully the drainage pattern. Usually, stormwater should be diverted around towards the edge of any site used by the public. Never fill plains nor erect structures in flood plains which will be flood by flood waters.
- 9 Always attempt to minimize long term maintenance. Do not try to cut capital costs by leaving out features which will save maintenance. The major costs of any project are usually long term running costs. Build energy conservation and water conservation into the design.
- 10 People are more important than motor vehicles. It is almost always necessary on a public reserve to restrict access by cars. Cars interfere with grass, with trees, with play - and with easy movement by people. Cars can kill trees by compacting the soil around their roots.
- 11 Ensure that all facilities are built with a high standard of workmanship. Vandalism and carelessness by the community will be less if the people can take a pride in what has been constructed.

Remember that public property although in theory belongs to everybody, in practice often belongs to nobody.
- 12 When designing drainage, try to allow infiltration as much as possible. The more stormwater which soaks into the ground, the more is available during the dry season, and the less flooding there will be downstream in the wet season.
- 13 Protect frontages of streams and the coast from damage. Beaches and river sides are scarce and it is better to leave them as undisturbed as possible.
- 14 Never bury hard rubbish on a public reserve. It will be always be a problem if foundations or pipe lines are to be constructed later. Rubbish does not compact very well. Domestic garbage will produce methane gas when it rots and this gas will kill trees for years afterwards.

Do not cover good quality natural ground with fill material, especially if the natural ground is top soil or fertile soil near a stream. Make sure that any fill material used is free of concrete and steel and other rubbish.

15. Minimise soil erosion. Usually it takes a long, long time for soil to form; for practical purposes once soil is lost from a sloping hill side, it is gone forever. Soil is vital for the production of food and everything else which comes from plants. Loss of soil into rubbish dumps or rivers and then out to sea is a national disaster.

16. Keep facilities and equipment simple. This applies when designing layouts, when choosing plants, building structures or storing equipment.

Especially, beware of imported mechanical or electronic equipment. Spare parts may be hard to obtain or the staff who know all about it may go finish.

17. It is better to employ labour than to buy or hire machines. Although labour is sometimes slower, it is better to give work to people than to bring in modern technology, which usually means sending money out of the country.

It is good to employ people from the neighbourhood where the facility is being built.

18. Use local materials as much as possible - timber and stone (local stone) are better than concrete. Bamboo is very useful.

19. Selecting Plants

Of the thousands of plant species available for horticultural work, only a small number are suitable for a particular purpose at a particular site. Here are some principles to follow when choosing the best plants for a site.

- a) Plants must be able to survive the conditions. Although plants can be helped by artificial watering, manure, or drainage, it is much cheaper and easier if the plants selected naturally like conditions present at the site. Check the rainfall, the soil conditions and the drainage. Observe other similar sites and note what types of tree do well.
- b) Choose plants which are valuable for more than one purpose. A plant which provides shade and also produces fruit is probably better than one which provides shade only. A plant which encourages birds into the city as well as showing attractive flowers is better than one that does neither.

However, it is important to achieve one purpose properly rather than two or three poorly.

- c) Do not choose bushy type plants in public areas near footpaths where they can hide rascals.
- d) Choose plants which have a shape which allows them to smother grass and weeds near them rather than one which has a narrow base and needs trimming around it all the time.

20 Choosing Arrangements

There are, broadly speaking, four types of arrangement when putting out plants in the ground. It is important, when selecting one of these to look at the existing themes nearby. The new plants should be arranged in a way which does not conflict visually with existing plantations.

- a) Random Mixed. In this arrangement, a very large number of varieties are all mixed up together without any pattern. This is the style which is usually followed in home gardens. It is appropriate there, because people's gardens are very individual matters. However, this style is usually not very suitable for a public planting. It looks disorganised. Large plants will crowd out small ones and a lot of maintenance will be required.
- b) Clumped. In this style, only a few species are used and these are scattered across the site. Sometimes they are grouped together in small groups all of the one species, or at other times they will be random. However, only the one size of plant or maybe two will be used, unlike the garden "hotch potch" where flowers, small shrubs, tall shrubs and trees are all mixed up together.
- c) Massed. In this style, large number of plants all of the one species are put together. This can look very effective, particularly when the plants are in bloom. The spacing can be random or it can be regular.
- d) Formal. In this style, plants are put in straight rows. Although this style is not a feature of PNG traditional life, it does suit cities fairly well, eg: beside buildings and long roads which have straight line boundaries. One disadvantage of this style is that if one tree later dies, then there will be a gap in the row which will spoil the regular appearance.

Which of these is most appropriate for a given place can only be decided at the time. Opinions will differ between different experts and much of the decision is based simply on personal choice. However, some arrangements are clearly good and some are clearly bad.

21 Summary

Landscaping is not just making an area look nice. The purpose of landscaping is to make a city comfortable, convenient and healthy place in which to live, a place in which people are not afraid to live and to bring up their children. Plants serve to provide the necessities of life - food, shelter, shade, firewood, building materials, recreation, bird life and many other purposes.

It is good to include many of these uses at every one site. However, it is important to avoid the mistake of failing to serve any onepurpose properly. Not all purposes are fully compatible and by following "multiple use", sometimes no one aim is achieved properly. Simplicity is a great advantage and simple landscaping schemes are usually more effective and look better than complex ones.



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