Planning and Infrastructure

December 2015

ITEM DESCRIPTION: Landscape design

Also refer to the other Landscaping fact sheets in this series.

Plants add to the visual and physical amenity of a school by providing shade, habitats for local wildlife, screening and reducing heat. Plantings at your school can create a distinctive visual character. Natural shade consists of trees, shrubs, groundcovers and climbers which block or absorb ultraviolet radiation (UVR).

Types of planting
- Amenity planting is for human comfort and includes things such as shade, screening and windbreaks. Amenity planting can also direct or restrict pedestrian and vehicular access.
- Ecological planting uses species local to your area to provide habitats for native birds and animals. Using local species, adapted to local conditions, conserves the character of a region both biologically and visually.
- Plantings of ‘Bush tucker’ plants demonstrate what some Aboriginal people may use as a source of food.

Where to plant
Effective planting of trees should provide shade that falls in the right places at the right times of the day thereby minimising the impact of UVR. Refer to the Planting Guide fact sheet for more information.

Buildings
Tree planting on the north, northeast and northwest sides of buildings will cast shade onto classrooms and covered verandas providing a cooling effect and reduce indirect UVR.

Active playgrounds
Active playgrounds are outdoor play areas that may or may not have fixed play equipment. Fixed play equipment areas should have total shade cover. This may be achieved with a combination of tree planting and built shade structures. Open playground areas can have a combination of tree planting and grass or a combination of paving, tree planting, planting beds or shade structures. Grass needs some sun for healthy growth. If grass is not going to be successful due to dense shade coverage consider installing impact absorption paving.

Passive play-grounds, covered outdoor learning areas, courtyards.
These areas should have total shade cover which can be achieved by a combination of small trees and built shade structures. If grass is unsuccessful due to dense shade coverage consider paving these areas and leaving “cut out” areas in the paving of at least 2 m x 2 m for planting small trees and water penetration.
In heavy pedestrian traffic areas a tree grate may be needed to protect the base of the tree from compaction. In other areas the cut out area may be planted with groundcovers. Ensure trees planted in paving have drainage installed to prevent waterlogging.

**Basketball or netball courts and cricket nets**
A combination of shade structures and tree planting is recommended. Group plantings of shade trees around the courts will provide shade for players and spectators. Tree root barriers (refer other fact sheet) should be installed for trees planted within 10 m of a paved area.

**Ovals/school boundaries**
Plantings around ovals and school boundaries can utilize the larger shade trees with dense foliage and wide spreading canopies. Ensure that planting does not obstruct spectators’ and officials’ views of the oval. Do not plant dense shrubby areas as this may provide a hiding area for undesirables.

**Pedestrian links and school bus stops**
Trees along pedestrian links should not be planted closer than 1.5 m to the walkway as structural damage to the built shade or the paving may result. Tree root barriers should be installed for trees planted within 10 m to a paved walkway. Ensure views to approaching traffic are maintained.

**Car parks**
Shade in car parks reduces glare and protects vehicles. Tree planting around the edge of the car park and in islands in the car park is desirable.

**Main entrance to school**
The main entrance to the school presents an opportunity for feature planting including small trees, shrubs, palms and groundcovers in mass planting beds.

**Factors to consider when planning landscaping**
1. **Supervision** – trees and shrubs should not hinder supervision of children playing in the grounds.

2. **Security** – dense screen planting adjacent to buildings and verandas can pose a security risk as it can provide a mask for vandalism and break ins. Consider using groundcover planting in security risk areas. Do not screen out security lighting with shade planting.

3. **Partial shade** – grass needs some sun for growth and therefore it should not be planted in fully shaded areas.

4. **Breezes** – take advantage of the cooling effect of natural breezes. Do not block these breezes with dense screen planting.

5. **Water availability** – prior to planting, determine if water is available in the area you want to plant and for the type of watering system that is going to be
installed. Drought tolerant native plants will require watering for the first couple of years until they are established.

6. **Planting distance from buildings** – as a guide, the mature height of a tree is the closest distance a tree should be planted to a building. Refer to the other Landscaping fact sheets for more information.

7. **Mass planting of single species** – mass planting of a single species of shrub or groundcover will have a greater impact than mass planting of many different species. Consider feature plantings at the main school entrance.

8. **Reduce landscape maintenance by creating planting beds** – Individual plantings in grassed areas can be incorporated into mulched planting beds and supplemented with additional plantings to provide screening and shelter. Mowing is easier around mulched planting beds than around single specimens in a lawn. Mowing strips may be used to define beds and will also assist maintenance.

9. **Mowing distance between trees** – allow spaces for mowing between tree plantings. Consider the size of the mower and hard landscape elements such as fencing, buildings and paving.

10. **Plant selection** – consider plants that require simple maintenance and are hardy, proven performers. Prior to selecting your plants consider the soil, drainage and microclimate of the area that you want to plant. Select plants that are best suited to the area you want to plant.

11. **Proximity to neighbours** – trees should be planted at sufficient distance from neighbouring properties to limit any nuisance in the future.

12. **Adopt a landscape maintenance policy** – incorporate regular fertilizing, pruning, topping up of mulch, Tree maintenance (refer other fact sheets) and checking of irrigation systems into your school’s grounds maintenance programs. Modify fertilizer applications to suit native species.

**RELEVANT STANDARDS / STATUTORY REQUIREMENTS**


Do not plant trees near underground or overhead services. Refer to the Power and Water Corporation’s website for their policy on Allowable Planting in Power and Water Sewer and Water Easements.