

FACT SHEET

PLANTING IN SCHOOLS GUIDELINE 1 DEFINING YOUR REQUIREMENTS

OCTOBER 2017 -PLANNING AND INFRASTRUCTURE

INTRODUCTION

Before planting commences, the requirements should be clearly defined to ensure the best outcome for the investment. Landscape planting can provide many benefits shade to buildings, reduction of indoor temperatures and power bills. Shade from trees creates a comfortable microclimate to outdoor spaces plants provide opportunities to educate (science studies, animal and plant interaction such as caterpillars, basis for art lessons, caring for land and indigenous studies) and demonstrate sustainable land management practices indigenous local plantings provide habitat for native fauna and increase biodiversity values in the local area planting in the playground can inspire exploration, social interaction, learning and controlled risk taking for children. To optimise the benefits the overall function and requirements should be carefully considered at the start of the project.

WHY ARE YOU UNDERTAKING PLANTING?

Careful consideration should be given to the purpose of the planting to ensure the best plant selection and landscape design. Use the following questions as prompts to help define your requirements:

- Who will use of the space?
- What is the intended use of the space?
- What is the role of the planting – shade, colour, screening, amenity/ aesthetics, habitat, educational, providing nature play opportunities within the playground?
- Is the planting to provide a specific function – identify and create interest to entry areas; define boundaries between facilities or play areas; providing privacy to specific buildings or classroom areas; directing the flow of pedestrian or vehicular traffic along paths and roadways?

OTHER CONSIDERATIONS

Landscapes and trees take time to develop and mature – they are living systems. The checklist below will help refine the detail of your planting:

- What are the priority areas for planting?
- Are there existing trees that have high value and will be retained and protected? This may require detailed assessment by an arborist or landscape architect.
- How will the plants be maintained?
- Are there other works planned in the area that may impact on your planting? 'Sacrificial' planting may be carried out if future development is many years away, or forward planting may be carried out if the nature of the development is known.

- Do you need a quick result, or is it OK for the planting to develop slowly over time?
- Are there any site constraints – underground and overhead services, safety and security including sightlines, micro-climate, proximity to buildings and facilities, soils/rock etc?
- Do you need to maintain good sightlines and clear visibility for reasons of safety, security and/ or supervision?
- Are regular and emergency access routes clear and unimpeded?
- Do you have a set budget?
- Will the area be irrigated? Group plants with similar water requirements.

WHERE NOT TO PLANT

Plants, and in particular trees, can cause problems when planted in the wrong location. To avoid problems down the track, consider the following:

Do not plant over underground services – Including power, water, sewerage, stormwater and telephones. Tree roots can cause stormwater, sewer and water pipe blockages that can cause interruption to services. Tree roots can cause damage to electrical and telephone services resulting in interruption to power and phone lines. Keep tree planting at least 3.5 m away from underground services. Shrub, palm and groundcover planting may be acceptable over underground services as long as services are not damaged during planting and root systems are not invasive.

http://www.powerwater.com.au/_data/assets/pdf_file/0015/14208/Allowable_planting_in_Power_and_Water_sewer_and_water_easements_-_August_2009.pdf

Very large trees such as Ficus spp. (Fig trees) and trees with vigorous root systems such as Schefflera actinophylla (Umbrella Tree) and Melaleuca sp. should not be planted within 30m of underground services.

Be careful planting below overhead services – Do not plant trees that will encroach on the clearance zone around power lines. The clearance zone is 1 m around power lines and 1.5 m around high voltage power lines. Plant trees far enough from power lines so that if a fully grown tree blows over, it will not encroach on the clearance zone around the wires. Shrub and groundcover planting is acceptable under overhead services provided they do not encroach on the clearance zone.

https://www.powerwater.com.au/_data/assets/pdf_file/0003/31449/powerlines.pdf

Consider tree sizes when planting close to buildings, walls and other built structures - Small/medium trees should be set back minimum 5m and large trees minimum 10m. Very large trees such as Ficus spp. (Fig trees) and Syzygium forte should be planted no closer than 30m to buildings, pathways or paved areas unless effective root protection is provided. These trees all have vigorous root systems that will seek out water. Tree canopies over buildings will drop leaves into gutter systems and potentially block them causing internal flooding.

In all cases, also consider the canopy spread to ensure the mature tree does not risk damaging the structure itself.

Generally all trees should be planted a minimum of 2.5m away from paths and other paved surfaces. For large and vigorous trees this should be 4.0m. Small shrubs and groundcovers may be planted closer.

These clearances described above may be reduced when trees are planted with correctly installed root barriers to a minimum of 600mm depth.

WHERE TO PLANT

Summarises the above information on where plants should and should not be planted at your school

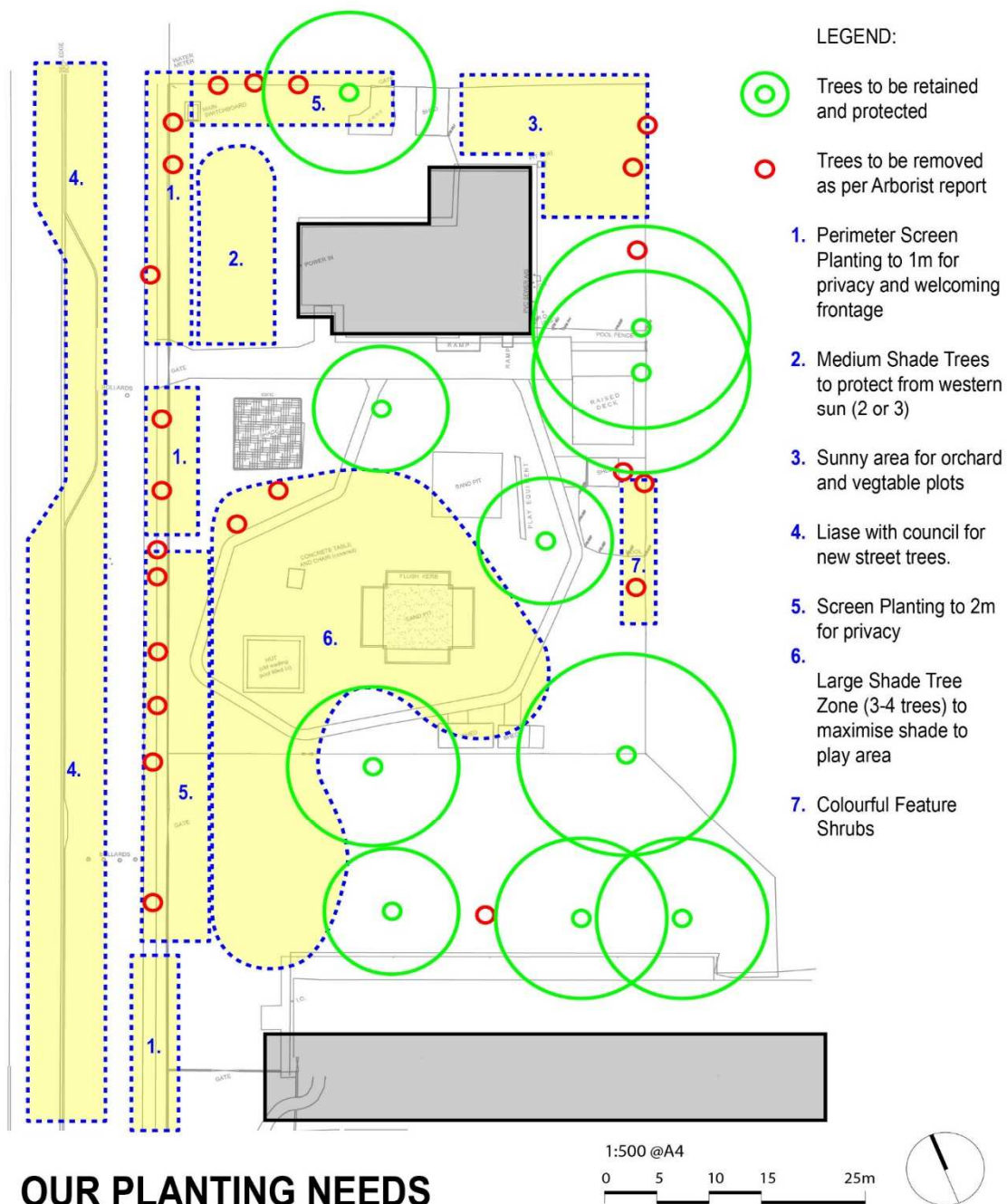
Table 1.

AREA OF SCHOOL	VERY LARGE TREES	LARGE TREES	SMALL/ MEDIUM TREES	PALMS	SHRUBS/ GROUNDCOVERS
On top of underground services	NO	NO	NO	YES Only if roots are not invasive	YES
Emergency access areas	NO	NO	NO	NO	NO
Below overhead wires	NO	NO	YES Only if tree species will not grow to height of clearance zone around wires	YES Only if palm species will not grow to height of clearance zone around wires	YES Only if shrub species will not grow to height of clearance zone around wires
Greater than 30m from a building	YES	YES	YES	YES	YES
Less than 30m but greater than 10m from a building	YES Only if root barrier used	YES	YES	YES	YES
Less than 10m but greater than 5m from a building	NO	YES Only if root barrier used	YES	YES	YES
Less than 5m but greater than 0.5m from a building	NO	NO	YES Only if root barrier used	YES	YES
Less than 0.5m from a building	NO	NO	NO	NO	NO
Within 2.5m from a pathway	NO	NO	YES Only if root barrier used and plants do not encroach onto path	YES Only if roots are not invasive and plants do not encroach onto path	YES If plants do not encroach onto path



BRINGING IT TOGETHER IN A PLAN

When the planting requirements and other considerations have been defined, it is helpful to transfer these thoughts onto a plan. You will need an accurate site plan to scale, ideally showing all ground surfaces, drainage and slopes, underground and overhead services, buildings etc. The plan over the page demonstrates what such a plan might look like.

School councils are encouraged to undertake landscaping in their schools. To avoid the disappointment of failed or poorly performing plants and their costly removal and/or replacement, schools are encouraged to seek skilled advice such as that from an experienced Landscape Architect or Horticulturalist when planning their landscaping project.



LEGEND:

-  Trees to be retained and protected
-  Trees to be removed as per Arborist report

- 1.** Perimeter Screen Planting to 1m for privacy and welcoming frontage
- 2.** Medium Shade Trees to protect from western sun (2 or 3)
- 3.** Sunny area for orchard and vegetable plots
- 4.** Liase with council for new street trees.
- 5.** Screen Planting to 2m for privacy
- 6.** Large Shade Tree Zone (3-4 trees) to maximise shade to play area
- 7.** Colourful Feature Shrubs

OUR PLANTING NEEDS

1:500 @A4
0 5 10 15 25m

