



Tree Consultants & Contractors

Tel : (03) 9888 5214

31 Jan 2017

Sylvia Der
 Manager Major Projects
 Property and Asset Services
 Department of Human Services
 Level 8, 50 Lonsdale Street
 Melbourne, Vic. 3000

Dear Sylvia,

re: Tree Assessment at Walker Street, Northcote

Introduction

A public housing site exists at Phillips and Hales Court, Northcote. Galbraith and Associates has been requested by the Department of Human Services to assess the trees on and close to the site and provide advice.

The Trees- General

There are approximately 35 trees on the site, none of which is native to Victoria including the local area. In most cases the age of the trees varies between about 20 years and 35 years, but some trees are likely to be as much as 50 years old.

Numerically the tree stock is dominated by exotic species, that is species which are native to countries other than Australia. They include a sizeable English Elm (*Ulmus procera*, tree 2) which is in reasonably good condition despite having been lopped some years ago. In the comparatively low maintenance environment of the nearby slope adjacent to Merri Creek, the same species has become a serious weed because, presumably, sucker growth from a small number of plantings has continued to develop unabated. The same type of phenomenon applies here to Pepper trees (*Schinus areira*). A sound healthy specimen (tree 23) is situated within the site but various self-sown trees have become established on the slope. A London Plane (*Platanus x acerifolia*, tree 29) near the end of a row of its own species has merit; but the other trees in the row are markedly lopsided due to their close proximity to the high wall of a residential block. European Nettle Tree (*Celtis australis*) have been planted in some paved areas; the trees are still smallish. Other exotic species include a mature Italian Cypress (*Cupressus sempervirens*, tree 4), a Scarlet Oak (*Quercus*

rubra, tree 19) and some Desert Ash (*Fraxinus angustifolia* subsp. *angustifolia*). The last is a weedy species.

Among the Australian trees, a couple of Smooth-barked Apple-myrtles (*Angophora costata*, trees 18 and 20) are continuing to grow vigorously and have a long Safe Useful Life Expectancy (SULE). A couple of Lemon-scented Gum are somewhat lankier. Other trees include one each of Prickly Paperbark (*Melaleuca styphelioides*) and Willow Bottlebrush (*Callistemon salignus*).

Explanations

In order to understand the column headings of the table of data, I have provided the following explanations:

DBH diameter of trunk over bark at breast height In a number of cases where the tree has forked into multiple trunks below breast height (1.3-1.5m) the diameter is measured below the fork and an estimate is made for the single trunk equivalent at breast height, or else figures for each of the individual stems can be given.

HxS This is the estimated height (H) of the tree and its average crown spread (S).

SULE Safe useful life expectancy in years. Taken in the context that the area is to be developed for residential use, and that sensible distances are maintained between the buildings and the trees, this is the estimate of time that the tree will continue to provide useful amenity without imposing an onerous financial burden in order to maintain relative safety, and avoid excessive nuisance.

Health is largely governed by the ease in which the metabolic functions are occurring throughout the tree. Symptoms of health include the amount, distribution, density, size and colour of the foliage.

Structure refers to the structural stability of the tree and its branches. A well structured tree is not likely to shed branches or stems, or snap in the trunk or blow over, whereas a poorly structured tree is more likely to.

Worthiness of Retention (WOR):

The worth for retention of a tree is based on the assumption that the site is to be re-developed, and that there is the opportunity for new tree planting. It is based on a number of factors. These factors are:

1. structure, health, form and safe useful life expectancy,
2. size, prominence in the landscape,
3. species rarity,
4. whether indigenous,
5. whether an environmental weed.
6. importance for habitat of native wildlife
7. whether of historical or cultural interest

Any tree with a WOR rating of 3 or less should be seriously considered for removal before development begins because it is dead, nearly dead or dangerous, a weed, is causing or is likely to cause a severe nuisance in the near future, or just of very little significance and readily replaceable with

new plantings. Trees rated 4-6 are of some significance. Some of these trees may respond to treatments such as formative pruning, removal of dead wood, weight reduction pruning etc. Trees rated 7 or higher are of high significance (the higher the ranking the more so), primarily because of their good health, structure, form, prominence in the landscape and SULE, although all they still may need substantial works done on them as already detailed, if they are to be retained.

Tree Protection Zone (TPZ) According to the Australian Standard AS 4970-2009 'Protection of Trees on Building Sites', the TPZ is the principal means of protecting trees on development sites. It is a combination of the root area and crown area requiring protection. It is an area isolated from construction disturbance, so that the tree remains viable.' The radius of the TPZ is calculated by multiplying the DBH by 12. The radius is measured from the centre of the stem at ground level. An area of 10% of the TPZ is deemed acceptable to violate if 10% of the area of the TPZ is made up in other directions. *Thus if encroachment is from one side only, encroachment to as close as approximately 8 times the DBH (2/3 the listed TPZ radius) is permissible according to the Standard.*

The TPZs as calculated according to the AS 4970-2009 should only be construed as a rough guide. They are only used in this statement because various local authorities now demand it in their assessments of development applications. Many factors such as the type of encroachment on the TPZ, species tolerance, age, presence of spiral grain, soil type, soil depth, tree lean, the existence of onsite structures or root directional impediments, level of wind exposure, irrigation and ongoing tree care and maintenance are each highly influential on the size and success of the TPZ estimation, therefore the figures derived from the Standard and provided in this report must be treated as rough guides only.

GALBRAITH AND ASSOCIATES

Knud Hansen B.A. (Melb.)
Dip. Hort. (Arboriculture)
Assoc.Dip.App.Sci. (Amenity Horticulture)