



Tree Consultants & Contractors
40 Glyndon Road, Camberwell 3124
Tel (03) 9888 5214
Fax (03) 9888 5063

15/Jan/06

Srini Vasan
Deputy Manager
Ancillary Services
Kew Residential Services
P.O. Box 15
Kew, Vic. 3101

Dear Sir,

re: Bishop`s Pine at Kew Cottages

Introduction

Concern has recently been expressed about the health of the Bishops Pine (*Pinus muricata*), in the car park area west of the kiosk. Galbraith and Associates was asked by Kew Residential Services on the 3/Jan/06 to inspect the tree. The inspection was undertaken on the 5/Jan/06 and verbal recommendations provided. The tree was inspected again on the 12/Jan/05.

The Tree

The tree is an unusual species in Melbourne. I understand it is on the Victorian Tree Registry. Prior to my visit it had been relatively stressed as indicated by its stunted nature and relatively thin foliar cover. Kew Residential Services responded to this situation several years ago by mulching around the tree and installing an irrigation system in the mulch. However a couple of medium sized branches still died.

In late December 2005 the gardening staff noted parts of the canopy losing colour. It is now apparent that approximately 80% of the foliage on the low westerly limb has died, and at least 50% on a limb going north-west. Scattered spots elsewhere on the edge of the canopy have recently died. There has been no increase in the extent of die-back or foliar discoloration over the week between the two inspections.

Recent Disturbance Around the Tree

Although there have been minor car park alterations recently, very little has changed near the tree. The car park has been built on grade to approximately 7m south-west of the tree. I undertook non root destructive exploratory trenching next to this recent car

park construction along the edge closer to the tree, and to a depth of the disturbed soil, approx. 100mm. No roots were encountered, thus no roots could have been severed during the construction.

Possible Cause of the Die-back

Determining the causes of the recent foliar death is a process of elimination. I cannot see the recent car park construction as having had any effect because I cannot see there being any root impact. I am informed by Parry Fraser Jones, supervising engineers for the civil works, that no chemicals or herbicides would have been laid down on the surface before car park construction began. Furthermore I would suggest that if this was the case, other trees in close proximity to works should have shown recent foliar chlorosis or die-back symptoms, which they have not. Parry Fraser Jones did suggest however that a blocked sewer was recently cleaned out in the vicinity. It is possible that roots within the sewer may have been ripped out in the process, leading to stress and possible foliar tissue disfunction on a day of high evaporative demand, eg. a hot north wind day in mid to late December.

It is apparent that a West Australian eucalypt (*Eucalyptus occidentalis*) or tree 680 as per the recent survey by Galbraith and Associates, has suddenly died over the same period. This appeared very healthy a couple of months ago and is a relatively drought tolerant species. Again, no works have been undertaken near it, nor are there any obvious causes for the tree's death.

Conclusion and Recommendations

Disease and death of the tree in the foreseeable future of the Bishops Pine is unlikely, unless there is some slow unknown and unseen pathogen at work. I probed the soil moisture content in five locations around the tree. Soil moisture content was good except for north, north-east and north-west of the tree where it was dry. Although from my probing it was obvious the tree had been irrigated, it would be prudent to irrigate more in the dryer areas north of the tree as mentioned. This was mentioned at my first visit. The irrigation should be kept up at the rate of approximately 350 litre every few weeks over the summer period. I would let the tree stabilize for a couple of years before undertaking any dead wood removal.

Yours faithfully,
GALBRAITH & ASSOCIATES



Rob Galbraith
B.For.Sci.(Melb.)
N.C.H.(Arb.)(U.K.)