

# ***Harraway Trees***

*Tree Management and Training*

## **Tree Inspection Report**



**Lincoln's Inn  
London WC2A 3TL**

**June 2015**

## Harraway Trees

Tree Management and Training

John Harraway F.Arbor.A, MICFor, DipArb (RFS)  
33 Freshbrook Road, Lancing, BN15 8DF

 Institute of  
Chartered Foresters  
Registered Consultant

Member of the Expert Witness Institute

### TREE INSPECTION REPORT

**Client:** The Honourable Society of Lincoln's Inn

**Location:** Lincoln's Inn, London WC2A 3TL

**Date of inspection:** 26 June 2015

**Inspector:** J. Harraway F Arbor A, MICFor, Dip Arb (RFS)

**Our reference:** TIR/0615/5

#### Instructions received:

I am instructed by Karen Clayton, Head Gardener, to carry out decay evaluations on three selected trees within the grounds of Lincoln's Inn and report on their structural condition.

#### General description:

The trees are contained within grounds encompassed by the historic buildings forming the Lincoln's Inn complex; all are mature specimens that have been identified during recent visual inspection of exhibiting features of possible structural weakness, prompting this further investigation. Specifically the following trees were assessed:

- T3 Broad leaved lime (*Tilia platyphyllos*)
- T7 Mulberry (*Morus alba*)
- T55 False acacia (*Robinia pseudoacacia* 'Frisia')

Two other False acacias, T56 and 57, were also subject to limited investigation as their condition impactson the future management of T55.

#### Method of inspection:

Following initial visual inspection, T3, T7 and T55 were all investigated using a Picus sonic tomography unit; T3, T7, T56 and T57 were also assessed using a Resistograph decay detecting drill in selected locations.

Brief details of the operating systems of these instruments are shown overleaf for information and to aid interpretation of the results.

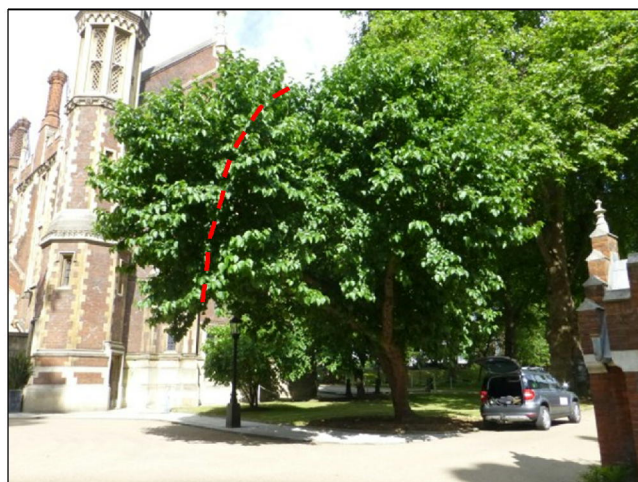


The lower of the two limbs has been braced in two places to a more upright part of the crown; an older style steel cable brace, using invasive screw eye anchors, has been enhanced by a modern non-invasive synthetic rope support. A wound is evident on the supporting limb at the point where the screw eye has been secured. This was accessed using a short extending ladder and found to be unaffected by any significant deterioration.

#### Comments

No significant structural issues were identified by the inspection, although the crown is developing a distinct and characteristic lean to the south. Typically this recumbent attitude in older trees of this species is managed by propping but this is obviously not practicable due to the presence of the tarmaced area beneath. I advise that the crown support systems already installed are supplemented by light and careful crown reduction on the south side.

For guidance, a photo of the crown is shown below with a red dotted line overlaid to indicate the *approximate* extent of reduction envisaged, if practicable. Please note the actual location of individual pruning points will of course be dependent on suitable side growth in each instance.



#### T55 False acacia

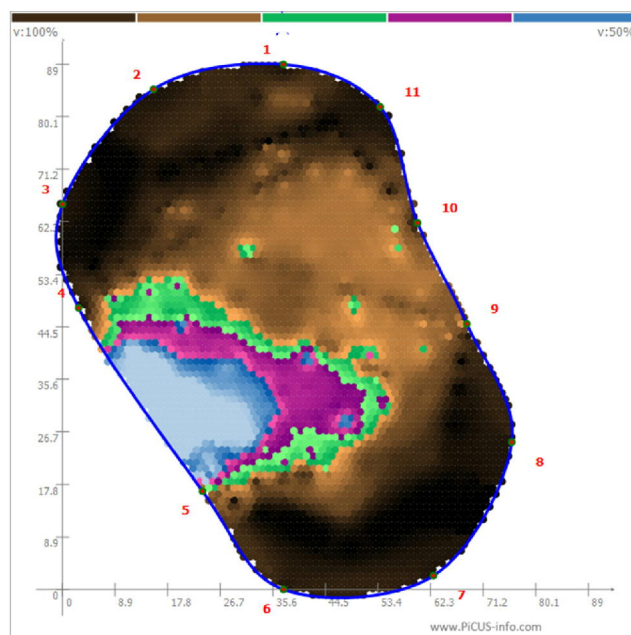
The tree is 17.6 metres in height and located in the south part of a grassed area in New Square. It forms one of a loose group of three similar trees which have been joined to one another at two heights on their stems by steel cable braces. The general vitality of T55 is far superior to that of its neighbours,

T55 was selected for investigation due to the presence of a deteriorating stem wound from ground level to a height of approximately 1.8 metres, the site of an old pruning wound (see photo).

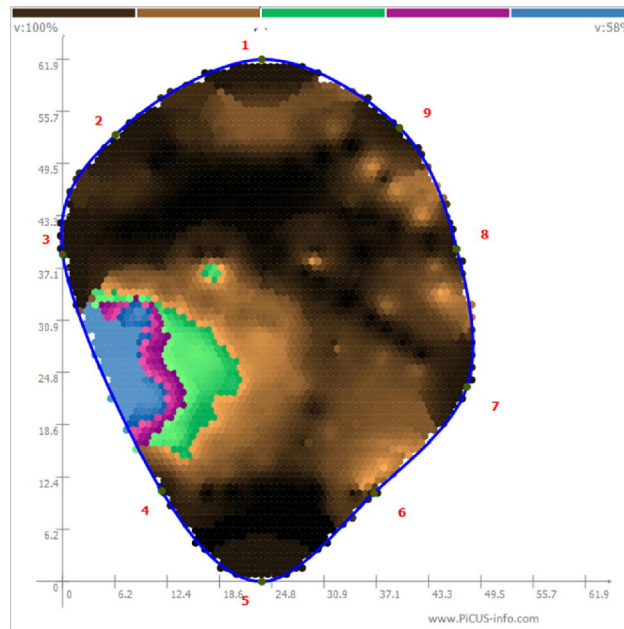




Tapping the stem with a nylon-headed hammer suggested deterioration was greatest close to ground level, indeed it was possible to insert a 25cm-long screwdriver into the stem at this level. Accordingly the Pius was used at this level, with a total of 11 measuring points; the tomogram, shown below, confirms the presence of decay in the vicinity of the wound (between MP 4 and 5):



Deterioration appears to extend a maximum of 30cm across the stem. In view of the length of the wound a further tomogram was measured at a height of 70cm, using only 9 measuring points due to the limited stem size; the result below indicates more limited deterioration at this level.



The current extent of deterioration associated with the stem wound is not likely to be structurally significant in my view, although further enlargement of the decayed area could occur in time.

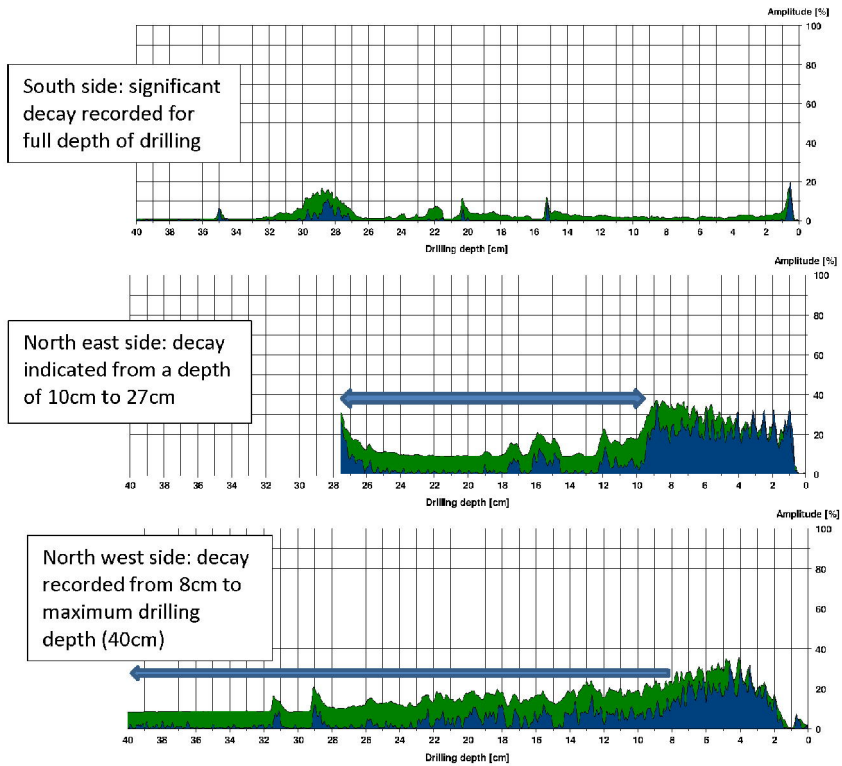
Cursory visual inspection of the other two trees in the group revealed areas of deteriorating bark and low resonance when tapped, suggesting the presence of internal decay. As their condition impacts on the management of T55, the Resistograph was used in three locations on the tree to the north east (south, north east and north west sides at a height of 10cm). The tree to the north west was investigated in one location on the north west side at 10cm through an extensive area of dead bark.

The drill traces are shown on the next page in the order of assessment; the results indicate that both stems contain significant decay. Coupled with their poor physiological condition the continued retention of T55 and T56 appears limited.

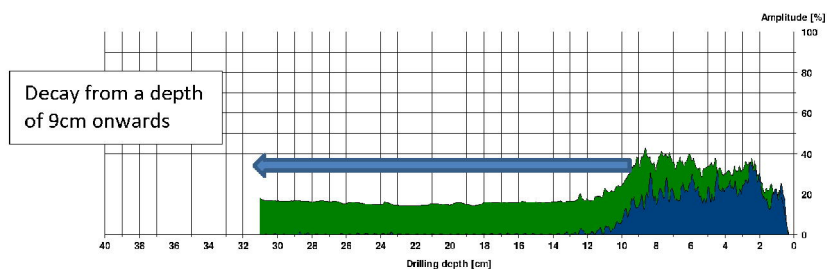




North east tree:



North west tree:



This final drilling auto-retracted at a depth of 31cm; this was due to drill deviation within a cavity.



Comments

The current physiological and structural condition of T55 appears superior to its neighbours; however the presence of the cabling system to them may have affected the distribution of its root system (assuming the supports have been in place for some years). If T55 is retained in the absence of the other two trees, light crown reduction may be prudent to improve its structural stability (by approx. two metres of current height and maximum spread).

Much of the visual appeal of the group has already been lost and, although none of the trees in the group represents a risk of failure (due to the presence of the cabling) I suggest the removal of all three trees should be considered. This would facilitate replanting with a new group of trees to provide future amenity in this part of the grounds.

**Summary of recommendations:**

- T3, Broad leaved lime: no further action appears necessary at present in relation to the tree's current condition; reassessment of the possible extent of decay in the vicinity of the stem cavity should be considered in 3 years
- T7, Mulberry: no significant decay indicated; consider careful reduction of growth on the south side of the crown
- T55, False acacia: current structural condition is satisfactory but deterioration in T56 and T57 may necessitate their removal. The removal of T55 could be considered also but if retained its crown should be subject to light reduction and the stem wound reassessed in 3 years

Signed:



**John Harraway *Chartered Arboriculturist***

Date: 2 July 2015

