

Proposed Tree Works for the Twickenham Embankment Enhancement Tree Scheme Rationale

The proposed tree work between Water Lane and Church Lane will include replacing 10 trees with 21 new trees which include 16 Oaks, 2 Hornbeams and 3 Dawn Redwoods.

Trees to be removed include:

- 8 diseased Horse Chestnuts (on The Embankment);
- 2 poorly formed and small ornamental fruit trees that are a slip hazard outside the Theatre.

The removal of the Horse Chestnut trees has been approved by the Richmond Council Arboricultural Manager, and is endorsed by Tony Kirkham, Head of the Arboretum at the Royal Botanic Gardens, Kew.

The reasons for removal :

- The Horse Chestnut trees are infected. There are 3 different diseases that are currently affecting thousands of trees throughout London and the South East. These are:
 - Bleeding Canker (fatal);
 - Leaf minor (severely weakens trees, making them more susceptible to other pathogens);
 - Leaf blight (severely weakens trees, making them more susceptible to other pathogens).
- Health and safety concerns. The diseases are a cause for concern as they will probably lead to limb failure and inevitably reduce life expectancy of the trees leading to premature death.
- This is an opportunity for comprehensive improvement of the embankment. The work undertaken to enhance the embankment long term could be jeopardised by failing Horse Chestnuts trees with potentially costly repairs.

Replacement tree selection:

Several species have been considered as replacements for the Horse Chestnuts. Richmond Council Arboricultural Manager has recommended larger "shade" trees in liaison with Tony Kirkham, as a suitable species and suggested avoiding lollipop type trees such as Sorbus sp. and Cherries. Several other trees proposed were dismissed as inappropriate and these include Pink Horse Chestnut, Elms and Plane trees.

Trees that can tolerate periodic flooding with dry spells in between are needed, and the following native and exotic trees were recommended as most appropriate:

- *Quercus palustris* (Pin Oak)
- *Carpinus betulus* (Hornbeam)
- *Metasequoia glyptostroboides* (Dawn Redwood)

The sourcing of these trees has commenced and the very best size and quality species have been selected (see attached pictures). It is proposed that Oaks (*Quercus palustris*) form the main avenue on the waterfront with a 6-8m height and a girth of 40/45cm. It is proposed that the Oaks are supplemented with Hornbeam (*Carpinus betulus*) 30/35cm girth and Dawn Redwood (*Metasequoia glyptostroboides*) 25/30cm girth in other locations on the embankment.