

Cheltenham:  
7 Royal Well Place  
GL50 3DN  
+44 [0] 1242 528 111

London:  
Plexal, 14 East Bay Lane  
Here East, Queen Elizabeth Olympic Park  
London E20 3BS  
+44 [0] 7595 218 104

mail@edgedesignworkshop.com  
www.edgedesignworkshop.com

## TREE PROTECTION AND PRESERVATION – METHOD STATEMENT

This statement should be read in conjunction with drawing 1578\_307 Tree protection plan.

Comments were made by the Council Tree Officers as part of application reference; 22/01673/AMEND | Non-material amendment to planning permission ref. 21/02772/FUL were it was acknowledged that the applicant has been taking appropriate steps to preserve the Norway maple tree (T01) adjacent to the proposed replacement garage;

*“The amendments are acceptable to the Trees Section. Although the sky lights could increase pressure to prune the Norway maple (which will cast some shade and drop leaves and debris), the applicant has gone to some lengths to retain this tree in the design of the building. No further details are required by the Trees Section. The gutter cover informative should be used.”*

We have taken this into account and recommend the use of leaf guards (mesh / brushes) be installed to all gutters to minimise the extent of dropped leaves and debris entering the rainwater goods and thereby the need for increased pruning of the Norway maple (T01). The construction of the garage foundation slab has also been designed to minimise the impact of the replacement structure and seeks to safeguard the tree as outlined below in this method statement.

## **BEFORE WORK COMMENCES.**

### GENERAL METHODS FOR TREE PROTECTION

Retained trees on or near the working area must be given suitable adequate clearance to guarantee their healthy preservation. This Method Statement should be followed throughout the preparation and construction of the development. Additional guidance can be found in BS5837:2012 - Trees in relation to design, demolition and construction – Recommendations.

The site manager will be responsible for the protection of all retained trees and for liaising with an arboriculturist about any tree related matters and prior to any works that may affect the Root Protection Areas (RPAs) or canopies of retained trees. Tree protection fencing must be placed around trees which maybe influenced by the construction work (see tree protection plan). The area within the temporary protective fencing considered to be the Construction Exclusion Zone (CEZ).

All contractors on site must be made aware of the following:

- Mechanical digging or scraping is not permitted within a defined RPA or within areas cordoned off by protective barrier fencing.
- No fires will be lit on site.
- Cutting down, uprooting, damaging or otherwise destroying any retained tree is prohibited.
- No change of levels is permitted within the CEZ (unless in accordance with this method statement). Leaning objects against or attaching of objects to a tree is not permitted.
- Materials which will contaminate the soil (e.g. concrete, cement, chemical toilets, diesel oil, vehicle washings etc.) must not be permitted within, or close to RPAs of retained trees. Consideration must be given to any sloping ground on site to ensure that contamination of soil in the RPA would not occur if there were spillage, seepage or displacement elsewhere on-site.

Works including cement mixing, re-fuelling and tool or machine washing will not be permitted within 10m uphill of any retained tree.

## CONSTRUCTION EXCLUSION ZONES

Retained trees shall be protected by appropriate barriers that will form a Construction Exclusion Zone (CEZ). Prior to construction work beginning the retained trees shall be protected behind temporary protective fencing in line with BS 5837: 2012 Trees in relation to design, demolition and construction - Recommendations and will be located as shown on the Tree Protection Plan. Where possible the CEZ shall enclose areas of the root protection area (RPA) where no construction work will take place. **The CEZ shall remain in place throughout the duration of the building work and shall be considered a restricted area; no pedestrians, vehicles, storage of materials, equipment or machinery are allowed within the CEZ. See appendix fig.2 for appropriate signage to be displayed at all times.**

The protective fencing shall be installed in accordance with BS 5837:2012 (see appendix fig.1) and comprise of a vertical and horizontal scaffold framework and well braced to resist impacts. Vertical tubes shall be driven securely into the ground taking care to avoid existing underground services and large roots at a distance of 3m spacings. Mesh panels are to be secured to the frame. Where existing hard surfaces are to be retained or where spacing is difficult a heras-style fencing system with rubber feet can be used.

## TEMPORARY GROUND PROTECTION

It is proposed construction vehicles and machinery will access the site via the existing vehicle entrance. This potentially impacts the root protection areas of trees to the north boundary of the site (T03-T06). However, an existing tarmac drive currently exists here and we anticipate minimal compression of the existing surface. It is intended to remove the tarmac surface at some point during the construction works and replace, however, this shall depend on the sequencing of the works programmed by the main contractor though we anticipate this being carried out more towards the end of the construction phase. In any event, following removal of ANY existing surface material temporary ground protection plates such as aluminium 'Eve Trakway' or plastic interlocking-plate ground protection; both on 150mm bed of woodchip or bark mulch shall be laid until the new surface is installed.

An area for material storage as been marked on the Tree Protection Plan on an area of existing hard surface away from existing trees which will provide some compaction relief. Any cement mixing must be done in an area with impermeable material laid at ground level e.g. plastic sheeting.

## DURING EXCAVATION WORKS

### EXCAVATION AND CONSTRUCTION OF FOUNDATIONS

Avoid physical damage to the root systems during demolition and removal of existing garage and surrounding surfaces and subsequent erection of the replacement garage in line with section 7.2 of BS 5837.

Due to the proximity of the proposed replacement garage to T01 careful working methods should be followed to minimise the potential for damage of nearby trees. Excavation within RPAs will be undertaken by hand tools only to the required depth of the foundation as specified by the Structural Engineer. The soil is to be loosened with the aid of a fork or pick axe and then cleared with the aid of an Air-spade, Air-vac and or shovel. Any roots found with a diameter of less than 25mm shall be cleanly severed with a hand saw or secateurs without consultation with an arboricultural consultant. Roots over 25mm shall be retained where possible and only cut after consultation with an arboricultural consultant.

The garage slab has been designed to be 'split' so that the foundation slab is set higher in the gym, lobby and garden store above the existing tree roots and supported on piles. This 'shallow dig' solution shall comprise of a 225mm deep R.C. slab cast over a polythene membrane over 100mm clayboard formers which shall not only provide 'heave' protection to the foundation but also help reduce compaction of the root system. The area of slab further north below the parking area shall be ground bearing so that it sits at the existing driveway level, again this shall be of shallow depth 255mm deep RC concrete laid over an impermeable polythene membrane.

The reinforced concrete foundations installed within the RPA of trees shall be lined in polythene membranes to prevent leeching of chemicals into the soil. All soil removal required for the foundations must be undertaken with care to minimise disturbance of roots

beyond the immediate area of excavation. Any exposed roots should be protected from direct sunlight, drying out and extreme changes in temperatures by covering the area with damp hessian.

## INCIDENT PROCEDURE

If any breach of the approved tree protection measures occurs:

1. The site manager must be informed immediately.
2. The Local Planning Authority Tree officer (or other Planning Officer) must be informed, as well as an appointed project Arboriculturist at the earliest opportunity.
3. Swift action must be taken to halt the breach and prevent any further breaches.
4. All preventative action and details of agreed remedial works must be recorded and reported to the LPA.

## POST COMPLETION WORKS

### TREE MANAGEMENT

Install leaf guards / gutter protection to all new gutters and down pipes to mitigate the amount of leaves and debris entering the stormwater drainage network, this shall reduce the need to prune the Norway maple (T01). However, prior to pruning or felling it is essential to check for nesting birds, bats, badgers and hibernating animals. Negligent disturbance is an offence under EC Habitats Directive 92/43/EEC, Countryside and rights of way act 2000 and Protection of badgers act 1992. The Conservation (Natural Habitats) Regulations 2007 make any damage or destruction of a breeding site of European Protected species an offence.

The contractor must satisfy himself that all necessary permissions from the local planning authority and tree owners are in place before commencing works to trees. Trees may be protected by TPO, planning conditions or lie within a Conservation Area.

All off-ground tree work should be carried out by insured tree surgeons with appropriate certificates in chainsaw use, working to BS3998:2010 and 'Treework at height' the Arboricultural Association's Industry Code of Practice. Stumps can be left to shoot again or be ground out or grubbed out.

APPENDIX

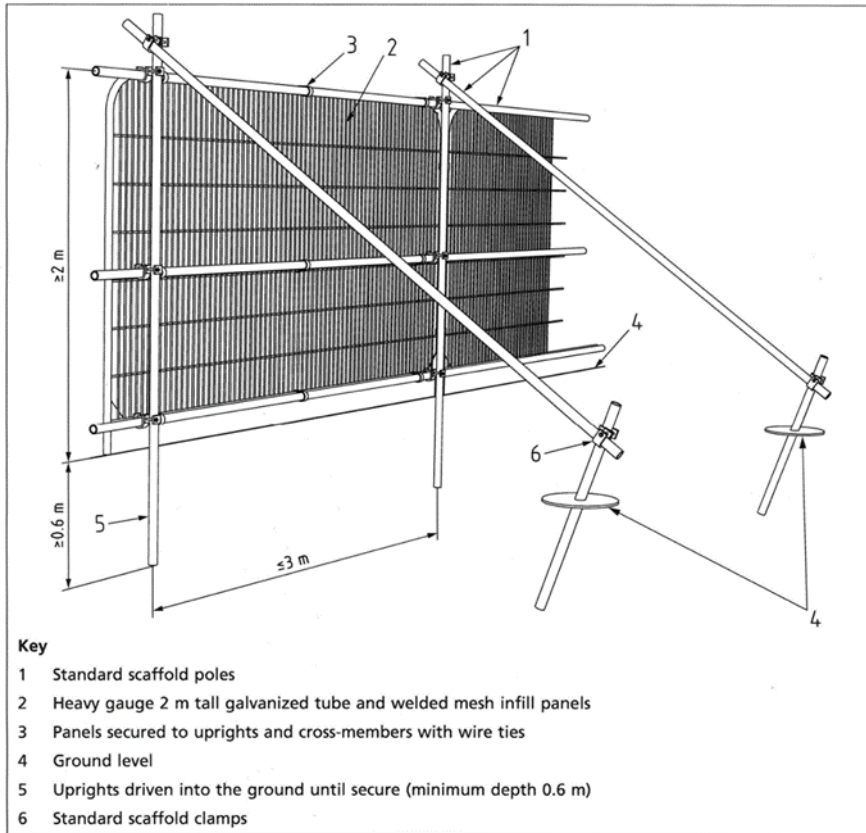


Fig. 1 Protective barrier to BS 5837:2012 to be used where situated on open ground.

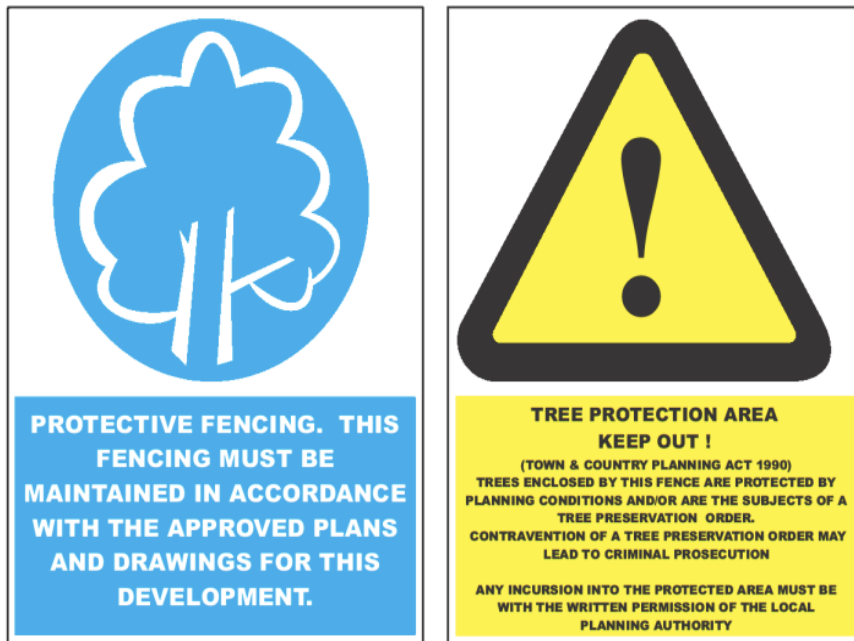


Fig. 2 Protective barrier signage to BS 5837:2012.