

Simon Pryce Arboriculture

Arboricultural Method Statement and Tree Protection Plan

Client: London Borough of Camden

Site: Site C, Grafton Road, London, NW5

Date: 2 February 2018

Reference: 13/061 AMS

Author: Simon Pryce, BSc, FArborA, RCarborA, CBiol, MICFor



I Introduction

1.1 This report has been prepared on the instructions of Hayhurst & Co, the architects acting for Camden Council in connection with the construction of a new house at site C, Grafton Road, London, NW5.

1.2 This has been granted consent by Camden Council, their reference 2014/4270/P subject to conditions. This document has been prepared to address condition 6, which states:

Prior to the commencement of any works on site, a method statement demonstrating how the Copper Beech tree on Site C shall be protected during construction work shall be submitted to and approved by the Council in writing. Such details shall follow guidelines and standards set out in BS5837:2012 "Trees in Relation to Construction". All trees on the site, or parts of trees growing from adjoining sites, unless shown on the permitted drawings as being removed, shall be retained and protected from damage in accordance with the approved protection details.

Reason: To ensure that the development will not have an adverse effect on existing trees and in order to maintain the character and amenity of the area in accordance with the requirements of policy CS15 of the London Borough of Camden Local Development Framework Core Strategy.

1.3 This document follows on from my preliminary survey and report reference 13/061, based on a site visit and tree survey on 21 August 2013. Comments and recommendations in the previous report still apply unless contradicted in this one, which also follows the guidelines set out in British Standard 5837: 2012, Trees in relation to design, demolition and construction.

2 Background

2.1 The only tree concerned is a copper beech growing near the centre of the site. Its root protection area (RPA) defined by BS5837 is larger than the plot, but the existing building and retaining boundary walls mean that the root system will be almost entirely contained within the site. Nevertheless the tree is sound and healthy, so is evidently gaining enough structural support, water and nutrients from the site, but is vulnerable to any ground disturbance within it.

2.2 Following detailed discussions with the architects the new building has been designed taking this into account. The main features of the design and work methods are set out in the Design and Access Statement and the Stage D submission. These are summarised below with some comments in *italics*:

Design Measures

1. The existing brick boundary walls to the site are likely to have contained the spread of the tree roots. It is proposed to contain most of the piling works to within this boundary wall area. *Piles will be 300 - 350mm diameter, similar to the existing boundary wall and its foundations, and most will be on the same line minimising any impact on roots.*
2. The piles will form a base for a series of concrete beams, which will support a slab above it. This creates a platform above the roots without requiring the existing ground level to be altered.
3. The piles will have a plastic sleeve inserted in them prior to the concrete being poured to avoid harming the tree roots by exposure to concrete.
4. The ground floor slab is raised off the ground and will therefore still allow for subfloor ventilation to the tree roots.
5. Excess rainwater from the roof will be channelled down to ground and back under the slab to irrigate the roots that are no longer exposed to the sky. *The tree's crown creates its own*

rain shadow, but much of its water supply also comes from rain running down the branches and trunk to the ground, which is not affected by the work or the finished building.

6. The entrance ramp will be of lightweight permeable construction to retain water and air supply to the roots.
7. Advice will be sought for the future maintenance regime of the tree by the purchaser to ensure that it is suitably managed and maintained to improve the tree's chances of survival into the future. *Regular maintenance of trees to contain growth is a common practice in urban areas and most species tolerate this well if done properly.*

Site Precautions

8. Pruning of the tree prior to construction to mitigate any die back of branches caused by intrusion into the root area. *See comment at 7 above. The initial reduction should be carried out as soon as practical in order to give the tree the maximum possible time to recover and acclimatise before work starts.*
 9. The site will be covered in a root protection mat which will spread the load of machinery and site works, and limits any incidental damage during the site works. *Ideally the site work should take place while the tree is dormant, i.e. between November and late February, failing that the period between March and June should be avoided.*
 10. Where it is necessary to pile inside the boundary wall footprint, an exploratory dig will be undertaken by hand with an Arboriculturist present to advise on the most appropriate siting of the piles to avoid
- 2.3 Tree protection measures are specified in detail in Part 2 of this document and illustrated on the attached tree protection plan (TPP) as specified by BS5837.

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Part 2 - Arboricultural method statement

This document is to be read in conjunction with the survey report and tree protection plan [TPP]. Any queries are to be referred to the arboriculturist.

Preliminary tree work

1. The lower edge of the tree's crown is to be lifted by pruning lower growth to provide clearance for the new house of approximately 6m above pavement level at the site perimeter. Upper branch ends are to be shortened by 1.5 - 2m and longer lateral branches by up to 2.5m to make the crown more compact. Branches are to be removed back to the parent limb or to suitable growing points as per BS3998:2010, Recommendations for treework.
2. This is to be done as soon as practical in order to allow the maximum possible time for the tree to recover and acclimatise.

Preliminaries

3. Before any building work starts the contractor and arboriculturist are to agree all work affecting the tree, particularly protective measures and confirmation that the pruning has created sufficient clearance to carry out the work.

Ground protection

4. The soft ground within the site is to be protected against disturbance, contamination and compaction. The options for this are:
 - Scaffold boards or 18mm min plywood placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100 mm depth of woodchip), laid onto a Terram ® or similar geotextile membrane;
 - Inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile membrane. Figure 1 shows a typical proprietary system.
5. When ground protection needs to be taken up to allow work, such as exploratory excavation to determine pile locations in the soft ground, this is to be done under arboricultural supervision and any excavation is to be carried out by hand.

Trunk protection

6. The trunk is to be boxed in up to the first branches to protect against impacts using 18mm minimum thickness plywood, details as shown on the inset in the TPP. An alternative such as a scaffold frame is acceptable, provided this cannot move and the bark is protected by padding. Figure 2 shows detail.
7. The box is to enclose any soft ground at the tree's base not covered by the ground protection.
8. The trunk box is to have at least one warning sign, as shown in figure 2, or a suitable alternative giving the same information.
9. No tree protection is to be moved or dismantled without the agreement of the arboriculturist.

Work methods

10. No work is to take place within the protected area without the prior agreement of the arboriculturist and without suitable alternative protective measures.
11. No equipment, machinery or structure shall be attached to or supported by the tree.
12. Any roots encountered during work should be covered to prevent them drying out and the arboriculturist notified.
13. Cement and concrete mixing must take place as far as possible from the protected area, so as to prevent soil contamination from spillage or washing out into the rooting zone.

Storage

14. No materials are to be stored within the protected area.

Landscaping

15. Protective measures are to remain in place until all work is complete.
16. Only soft landscaping is to take place. No levels are to be changed beyond what is required for planting and any irrigation pipes are to be above ground or dug in by hand.
17. No persistent soil acting herbicides are to be used.

Completion

18. Once site work is complete the tree and surrounding ground are to be reinspected and any necessary final pruning, soil aeration or fertilising are to be carried out.

Supervision schedule

19. The arboriculturist is to check the installed tree protection measures before any work starts. Further inspections are to be made at monthly intervals, with one off visits if the need arises, for instance if large or significant roots are encountered in work areas.

Contact details

Position	Name	Phone	Mobile	e mail
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Owner	TBA			
Main contractor	TBA			
Site manager	TBA			

Figure 1 - Proprietary ground protection system



Figure 2 - Trunk protection

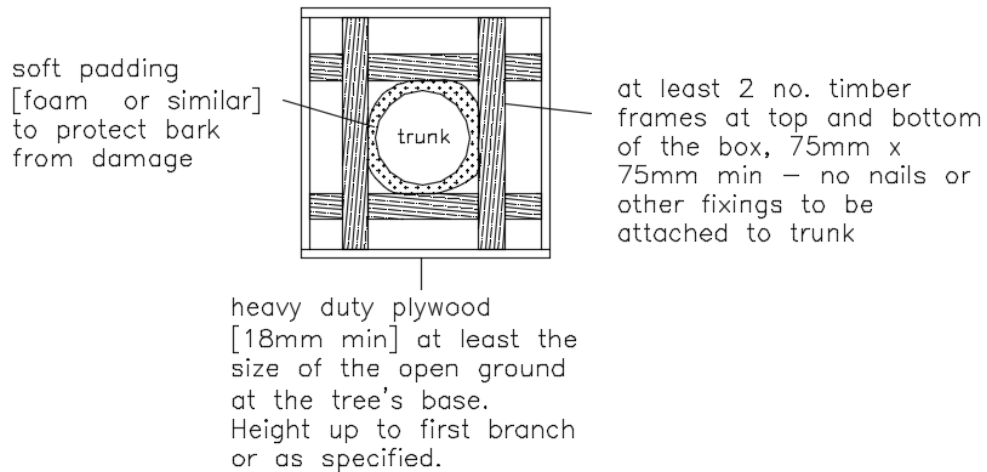
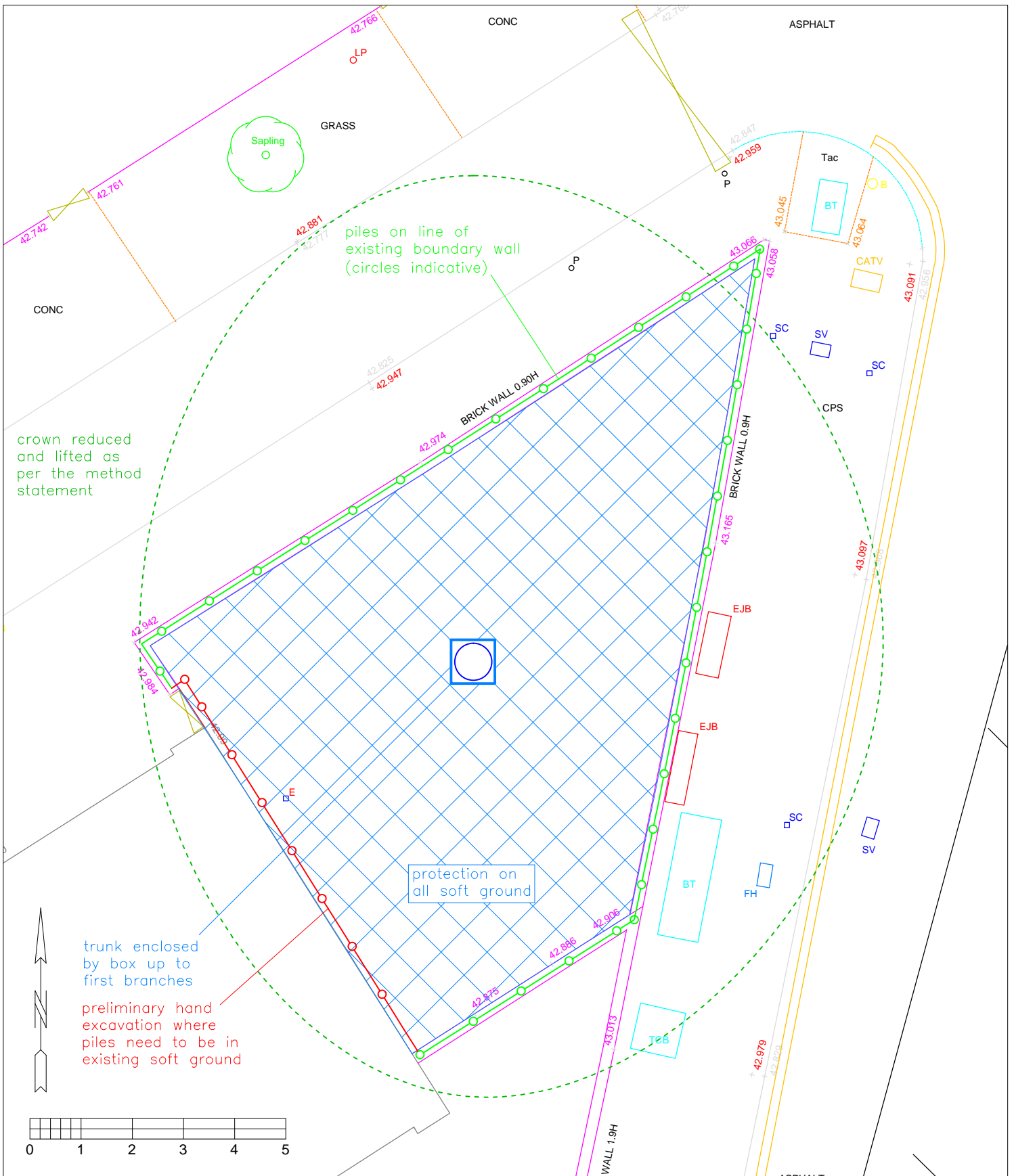


Figure 3 - Signs for tree protection





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	Site: Grafton Road, NW5, site C	Scale: 1:100 at A4		
	Title: Tree protection plan (TPP)	Original drawing: Hayhurst & Co Architects		
	Date: 3 February 2018			