D F Clark Bionomique Ltd

Arboricultural Method Statement and survey of trees at:

Goldington Buildings
Royal College Street
London
NW1 0PA

Allenbuild Ltd South East

Sharon Hosegood MICFor M Arbor A BSc (Hons) Tech Cert (Arbor A)

18 March 2010

Our reference DFC A 108

Contents:

Appendices:

1.0 Executive summary:

1.1 This report provides information to assist construction near trees of approved development for alterations an conversion of existing buildings which was granted planning permission from Camden Council on 8 February 2010. Goldington Buildings is within a Conservation Area but the trees are not protected by a Tree Preservation Order.

1.2 This report has been commissioned by Allenbuild Ltd South East to establish the condition of the trees and to see if they could be removed and replaced for operational reasons.

1.3 There are nine trees growing in the communal courtyard accessed through an archway. Five of the trees are Chanticleer pear (four of which are young) and the remaining four trees are young/early mature False acacia. Two of the trees are in a very poor condition (T5 False acacia and T8 Calleryana pear), the remainder are in a good condition.

2.0 Scope Of Client Brief:

2.1 To analyse the scheme and the impact on trees to be retained and create a tree protection plan.

2.2 To make a judgement on reasonable tree removal in the light of the refurbishment requirement for scaffolding and for new tree planting

3.0 The site:

3.1 Goldington Buildings is on the corner of Royal College Street and Crowndale Road and is an attractive visually prominent four storey building in a horse shoe shape. There is a central courtyard, accessed through an archway, which is almost entirely laid to hard surfacing. Within the hard surfacing are small planting beds containing the trees and a few shrubs. The courtyard is level, with the exception of raised paving on the northern side and has potential for landscape improvement. The courtyard can be viewed, framed by the archway, from Crowndale Road.

4.0 The trees:

4.1 Generally:

The trees comprise of two species which are tolerant of urban conditions and compaction. They have been planted in two phases, T1—T5 being more established than the more recently planted T6—T9. The trees T1 and T2 can be seen through the archway from the street, however, due to their size and distance from the road are dominant landscape features. All the trees are visible to the residents of these multi occupancy buildings.

4.2 Categorisation:

The trees have been classified in accordance with the BS 5837:2005 'Trees in relation to construction' as defined in appendix one. There are no trees of high value, however, T1—T3 are moderate value (classified as B) and T4, T6, T7 and T9 are of low value (classified as C, but with potential to improve with maturity). Two trees are categorised as R, recommended to be removed due to their condition; T5 false acacia due to fire damage and T8 as the main leader is dead and decayed.

4.3 Legislation:

The trees are within a Conservation Area, therefore six weeks notice to Camden Council is required before carrying out the work. Accordingly an application to carry out works is found at appendix five. Camden can either raise no objection, or if they object to the proposed works, a Tree Preservation Order has to be made. There are no imminently dangerous trees, although the condition of the fire damaged tree T5 will deteriorate, especially as False acacia has such a brittle timber. Therefore, as the owner has a liability under the Occupiers Liability Act (1957 and 1984), it is recommended to fell this tree and replace it. There are no tree related planning conditions on the consent 2009/5741/P.

5.0 Arboricultural Impact Assessment:

The approved scheme is for refurbishment of the houses which will involve installation of the scaffold. The young Chanticleer pear treesT6—T9 will conflict with the scaffold line, and therefore it is proposed to remove these trees and replace them at the end of the project. There is no proposal to change the surfacing, although there may need to be some localised excavations to re line existing services. The trees to be retained will be protected with braced Heras panels during the refurbishment process.

6.0 Replacement planting and landscape opportunities

6.1 All the trees to be removed will be replaced at the end of the project. The trees will be container grown . The courtyard is empty in the centre and rather featureless and there is an opportunity to provide a new tree at the centre to provide a focal point. If carefully located, it could form a focal point when viewed from Crowndale Road, and there would be an opportunity to provide a larger species of tree. This would provide shading and visual interest for the residents.

6.2 Species: The trees would be replaced as follows:

- T5 False acacia—replace with 1 False acacia (*Robinia pseudoacacia*) 16—18 cm girth
- T6—T8 Chanticleer pear replace with 3 Chanticleer pear (*Pyrus calleryana Chanticleer)* 14—16 cm girth
- T9 Chanticleer pear replace with either: Field maple cultivars (*Acer campestre Elsrijk or Louisa Red Shine)* **or** Crab apple (*Malus trilobata*) **or** Silver birch (*Betula ermanii Holland*). The species selected are low or moderate water demanding (NHBC Chapter 4.2) and tolerate urban conditions and have a fairly upright crown. 16—18 cm girth

6.3 Specification:

All plant stock, plant handling and planting to be undertaken in accordance with the following British Standard Specifications and Code of Practice:

BS 3936: 1992 Part 1 Nursery Stock. Specification for Trees and Shrubs.
BS 4428: 1989 Recommendations for general landscaping operations.
The Code of Practice for Plant Handling 1985. (Horticultural Trades Association).

6.3.1 Plant stock to be supplied in accordance with the size and description specified on the plant schedule. Plant stock shall be healthy, vigorous, and free from pests and diseases and suitably hardened off for the proposed situation of planting, and lifted at a time in accordance with good nursery practice. Stock shall have a well formed fibrous root system and be free from perennial weeds. The form of the tree shall be in accordance with BS 3936: Part 1:1992, Section 7, and Form of Trees.

6.0 Replacement planting and landscape opportunities

6.3.2 Planting: The trees are to be planted in tree pits 1m square (where space allows in the existing planting beds) and 300—400mm deep. The pits are to be square in shape and the sides roughened with a fork. The central tree location should be established after carrying out a CAT scan to check for underground services. The paving should be broken through and a tree pit created, importing a small amount of good quality top soil. The sub soil below this depth is to be decompacted with a fork. The trees are then to be placed into the hole up to the nursery mark and a proprietary tree fertilizer added. Soil is to be added and backfilled. On the top and around the root ball will be an irrigation tube, 4m long . A root director is to be used only on the central tree, please see the tree pit details at appendix three. The pits are to be filled up to ground level.

6.3.3 The trees are to be supported by two equidistant peeled chestnut stakes with a timber strut at the top of the stakes. The stakes are to be placed on the outside edge of the root ball and attached to the trunk by a proprietary rubber sling systems or hessian ties . The finished height of the stakes is to be one third the height of the tree.

6.3.4 All nursery tags and tape and defective branches to be removed. The trees are to be mulched with 50mm deep dark bark chippings. The trees are to be watered in to field capacity.

6.3.5 Maintenance:

The trees will need to be regularly watered up to field capacity in dry weather and any dead or dying branches removed. The ties will need to be checked and loosened in June and October. After 3—5 years the ties and stakes should be removed. If the trees have died, they should be replaced in the first available planting season. The existing trees T2 and T3 are likely to need light pruning to prevent the canopies from touching the sides of the building, every three years (dependant on rate of growth). A Conservation Area application will be required each time.

7.0 Recommendations:

7.1 That the trees to be retained during refurbishment

7.2 That trees to be removed are replaced in the first available planting season in accordance with the specification

7.3 That the new trees are maintained for the first three years to ensure establishment and replaced if they fail

7.4 That the choice of species (from the suggestions) and the concept of the location of a central tree is discussed with the client and residents representatives.

7.5 That if there are to be any excavations in the tree protection zone due to refurbishing existing services, that the advice of an arboriculturalist is sought

8.0 Conclusions:

8.1 The refurbishment requires scaffolding which makes retention of the young Calleryana pear trees difficult. In addition, one of the False acacias is in a poor condition. An application to remove these trees included in the report, and the trees will be replaced at the end of refurbishment. This gives an opportunity to provide a central tree with a higher visual amenity and room to grow. However, in order for a tree in this location to be successful, it must fit in with how the residents use and enjoy the space, therefore their views should be taken into account. If a central tree is not wanted, then the replacement for T9 should be in the same location as existing.

Sharon Hosegood MICFor M Arbor A BSc (Hons) Tech Cert (Arbor A)
Director—DF Clark Bionomique Ltd

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Appendix one – key to tree survey sheets

Key to survey sheets

The classifications adhere to the principles of the British Standard 5837:2005 " Trees in relation to construction – Recommendations". However, explanations for the terms have been changed to reflect the approach of this company to the practical aspects of categorising trees in the field.

Abbreviation	Definition
NP	Newly planted
Y	Young. Less than a third life expectancy.
MA	Middle aged. Excurrent shoot growth, not readily transplantable and still likely to increase significantly in size.
M	Mature. Shoot growth decurrent. Phase of growth when the tree has effectively reached up to 90% of its ultimate size for the species & location.
OM	Over mature. Trees in senescence. In decline from disease, decay, root death, structural or stability problems resulting primarily from old age. Characteristically, senescent trees are likely to be reducing in mass due to the shedding of branches.
V	Veteran Tree. A tree older than typical age for the species and of great ecological, cultural and aesthetic value.
Ht	Height in metres.
Cr Ht	Crown height (from ground to lowest branch)
Ult Ht	Ultimate height of tree.
NSEW	Crown measurements from trunk to tip in a north, south, east and west direction
Cond.	Physiological condition
Life Exp	Life expectancy
RPA	Root protection area. A layout design tool indicating the area surrounding the trees that contains sufficient rooting volume to ensure the survival of the tree.
TPZ	Tree protection zone (TPZ) - an area based on the RPA in m2 identified by an arboriculturist, to be protected during development, including demolition and construction work, by the use of barriers and/or ground protection fit for purpose to ensure the successful long term retention of the tree.

BS 5837:2005 Tree Categorisation based upon Table 1	
Category	**Description**
A Green	**Trees of High Quality and Value** A1 - Mainly arboricultural values A2 - Mainly landscape values A3 - Mainly cultural values, including conservation
B Blue	**Trees of Moderate Quality and Value** B1 - Mainly arboricultural values B2 - Mainly landscape values B3 - Mainly cultural values, including conservation
C Grey	Trees with Low Quality and Value C1 - Mainly arboricultural values C2 - Mainly landscape values C3 - Mainly cultural values, including conservation
R Red	**Trees in such a poor condition, both / or physiological and structural, that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management.**

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Appendix two – Tree survey sheets

Site: Goldington Court, Royal College Street, London							Weather: Dull and cold				Sheet No. 1
Surveyor name: Sharon Hosegood							Tree Survey Table - DF Clark Bionomique Ltd				
Date: 8 March 2010		Client: Allenbuild Ltd South East									
Tree No.	Species	Tree height (m)	Stem dia at 1.5m / (mm) RPA radius (metres)	Crown spread (metres) N ES W	Age class	Physiological condition	Est. Years	BS Cat	Crown clearance (m from ground level)	Structural condition / Comments	Preliminary management recommendations
T1	Chanticleer pear *Pyrus calleryana 'Chanticleer'*	10.5	200 Root protection Area (RPA)– 18 square metres Radius (R) – 2.4 metres	N – 2 E – 2.2 S – 1.9 W – 1.9	Y/ Em	Good vigour	40	B2	2.2	Typical for species with steeply ascending branches, slightly weighted on eastern side where tips are approaching building One sub lateral crosses stem at 4m on western aspect Very minor twig damage Growing in a 1m wide planting strip with block paving either side	Remove crossing branch Annual monitoring
T2	False acacia *Robinia pseudoacacia*	14	191 RPA – 17m² R – 2.3m	N – 3 E – 3.1 S – 2.8 W – 2	Em	Good vigour	40	B2	5	Typical for species – high crown with two dead lowest branches Historically crown lifted with one small wound on northern aspect at 2.5m Growing in a 1m wide planting strip with block paving either side	Remove dead wood with a diameter greater than 25mm Annual monitoring
T3	False acacia *Robinia pseudoacacia*	14	300 RPA – 41m² R – 3.6m	N – 4.5 E – 4.2 S – 3.2 W – 4.4	Ma	Good vigour	40	B2	6	Typical for species with high crown, the tips of which touch adjacent building on north eastern aspect Lowest branch dead and hanging in crown on eastern aspect Has been crown lifted in past, resulting in wound on northern aspect @ 1.5m Growing in a 1m wide planting strip with block paving either side	Remove dead wood with a diameter greater than 25mm and remove hanging branches Annual monitoring

Site: Goldington Court, Royal College Street, London							Weather: Dull and cold				Sheet No. 2
Surveyor name: Sharon Hosegood							Tree Survey Table - DF Clark Bionomique Ltd				
Date: 8 March 2010		Client: Allenbuild Ltd South East									
Tree No.	**Species**	**Tree height (m)**	**Stem dia at 1.5m / (mm) RPA radius (metres)**	**Crown spread (metres) N ES W**	**Age class**	**Physiological condition**	**Est. Years**	**BS Cat**	**Crown clearance (m from ground level)**	**Structural condition / Comments**	**Preliminary management recommendations**
T4	False acacia *Robinia pseudoacacia*	10	200 RPA – 18m² R – 2.4m	N – 2.5 E – 2.4 S – 2.2 W – 2.4	Y/ Em	Good vigour	40	C2	4	Typical for species, with crown overhanging single storey building Has been crown lifted in past, resulting in flush cut on northern aspect Growing in a recess in wall, which is cracking on western aspect The ground on the northern aspect is1.5m higher, on the southern aspect there is a small planting bed with block paving courtyard	Annual monitoring
T5	False acacia *Robinia pseudoacacia*	10	200	Average 2.5	Y/ Em	Good vigour	5?	R	6	Significant damage, presumably from a fire, leading to death of bark from base to 3m	Fell and replace
T6	Chanticleer pear *Pyrus calleryana 'Chanticleer'*	5	100 RPA – 5m² R – 1.2m	Average 1	Y	Good vigour	40	C2	2	Typical for species Growing in a 1m wide planting strip with block paving either side Slightly gaunt form	Annual monitoring
T7 & T9	Chanticleer pear *Pyrus calleryana 'Chanticleer'*	9	150 RPA – 10.2m² R – 1.8m	Average 2	Y	Good vigour	40	C2	2	Typical for species Growing in a 1m wide planting strip with block paving either side	Annual monitoring

Site: Goldington Court, Royal College Street, London							Weather: Dull and cold				Sheet No. 3
Surveyor name: Sharon Hosegood							Tree Survey Table - DF Clark Bionomique Ltd				
Date: 8 March 2010		Client: Allenbuild Ltd South East									
Tree No.	Species	Tree height (m)	Stem dia at 1.5m / (mm) RPA radius (metres)	Crown spread (metres) N ES W	Age class	Physiological condition	Est. Years	BS Cat	Crown clearance (m from ground level)	Structural condition / Comments	Preliminary management recommendations
T8	Chanticleer pear *Pyrus calleryana 'Chanticleer'*	2	100	1.5	Y	Fair vigour	5	R	1	The main leader is damaged and is dead from 1.5m New side shoots are growing up to be the main leader, however, general poor structural form	Fell and replace