**FREE PROJECTS** 

PROFESSIONAL & TECHNICAL ARBORICULTURE

6<sup>th</sup> December 2010

Collins & Coward Westwood Park London Road Little Horkesley Colchester Essex CO6 4BS

1.

FAO lan Coward

Dear lan,

#### Re: 10 Lindfield Gardens – Arboricultural statement in support of Planning Application

I write with reference to revised drawings provided to me by the Basement Design Studio in connection with the above property under references:

Premises as Existing drawings LBAD 921: 10/054-25 and 10/054-26 A Sheet 1 to 4 and 10/054-27 to 10/054-34 inclusive.

Proposed drawings LBAD 921: 10/054-35 to 10/054-44 inclusive (with suffix Rev A in respect of 35/ 40 and 43)

This submission comprises the arboricultural statement to be submitted in support of the proposal.

**Background Information:** Tree Projects provided documentation and tree root investigative services in support of planning application London Borough of Camden reference 2009/3436/P. This application was refused 6<sup>th</sup> October 2009 and subsequently appealed under Planning Inspectorate reference APP/X5210/A/10/2120205. The appeal was dismissed 14<sup>th</sup> June 2010 following which the scheme has been re-designed with consideration to the Inspector's comments.

At application 2009/3436 the principle of basement formation itself did not give rise to arboricultural objection. The focus was on a TPO Yew tree located within the front garden where the existing front garden steps were proposed to be removed and re-designed. Works to the steps did initially give rise to arboricultural concern however these were addressed following on-site investigations that enabled an objective assessment of the rooting pattern of the tree, together with proposals for control of construction and cultural mitigation. Prior to final determination of application 2009/3439 no arboricultural objection was registered by the Council Arboriculturist with the implication being that sufficient control could be exercised by application of planning conditions.

During the appeal, construction of two retaining walls associated with re-design of the steps, although found to be arboriculturally acceptable, were considered to introduce too hard a landscape character, and therefore, deemed detrimental to the appearance and character of the conservation area. The retaining walls have been omitted in the revised details cited above.

Professional Arboriculture: Planning & Tree Surveys. Technical Arboriculture: Planting - Air Spade - Root Protection

TREE PROJECTS LTD. REGISTERED IN ENGLAND 6462903. THE MAISONETTE, 22 OLD PARK AVENUE, LONDON SW12 8RH MOBILE 07788 726 720 \* LAND 020 8763 1114 \* TREEPROJECTS@HOTMAIL.COM

#### **Revised Proposals- Arboricultural Implications**

8

Tree Projects conducted a site survey on 22<sup>nd</sup> May 2008 and prepared a schedule of trees (copy attached). Tree plot positions and numbering are presented on Basement Design Studio drawings and in particular I refer to Premises as Existing drawing 10/054-25 (sheet 1 of 4) as a reference for tree locations.

The new drawing set continues to propose removal of the front garden steps with their replacement to a new layout that is identical in footprint and detail to that at 2009/3436.

The proposed configuration of the new steps is shown on Basement Design Studio drawing 10/054-26 and 10/054-36 within which the existing footprint of the current steps arrangement is shown dotted and under-laid.

Tree Projects undertook site investigations to assess rooting patterns of the Yew tree T6 and the findings were reported by us in our Site Briefing Note dated 2<sup>nd</sup> November 2009. The document is now appended to this submission.

Within our Site Briefing Note at Photograph One on page 2 and the Appendix One Sketch Plan on page 7, it can be seen that the line of investigation followed that of the proposed steps currently submitted and represented on drawings 10/054-26 and 36.

No significant roots would be harmed by excavations to form the new steps.

Drawings 10/054-26 Scheme Designs and 10/054-38 & 39 Front Drive Proposed Elevation 1 & 2 show sections through the front garden complete with level reduction information which will be of arboricultural interest. I would clarify that the level reductions show are from the original survey drawing which included a section through the Yew tree. In context of the current proposal the dotted line shown is a representation of levels one is looking *through* and it has been confirmed to me no reduction of levels are proposed to the existing driveway other than those works to form the new arrangement of the steps, i.e. works to form footings which will be along the line of tree root investigation.

The principal departure of the current proposal versus that of 2009/3436 is the omission of retaining walls that would have extended ninety degrees to the pavement and run from the existing front garden wall back to the newly configured steps. For reasons cited in the planning appeal Inspector's report and as referred to above, these retaining walls have now been omitted. Also omitted is the proposal to install block paving to the parking areas which are to be gravel surfaced. The net effect seeks to lessen the extent of hard landscape and surfacing and thereby ensure conservation area amenities remain protected.

Previously application 2009/3426 sought to convert the area of the existing arcing driveway to garden and, correctly implemented, this was judged to present an opportunity to increase the area of rooting potential for the Yew which in the current context is severely limited due to the hard and compacted nature of the surfacing.

It is my view that it would remain desirable for the long term benefit of the Yew if the arcing driveway was de-commissioned and returned to informal garden planting, a matter that could readily be devolved to application of conditions.

#### **Tree Protection**

1

To implement the proposal a scheme of tree protection will be required to prevent construction overspill that could have adverse effects on the Yew. Tree protection measures are commonly handled by application of planning conditions and in this instance we submit attached an indicative tree protection plan TPP\_102\_A. This plan can either be referred to directly within a condition attached to a planning approval for immediate implementation or, should a variation to it be required, by application of a standard tree protection condition it can be re-visited and altered to LPA satisfaction.

## **Conclusions and Recommendations**

On the basis of the discussion above and appended information the following conclusions and recommendations are made:

- Basement formation is arboriculturally acceptable
- Re-design of the front garden steps is identical to that in application 2009/3436 to which no
  arboricultural objection was raised.
- On site trial excavations were aligned to the proposed steps and no significant tree roots were encountered.
- The existing driveway will become superfluous and should be de-commissioned under arboricultural instruction and re-assigned to garden use: this should be controlled by application of appropriate planning conditions.
- De-commissioning of the driveway has the potential to improve rooting potential for the Yew as well as offering potential enhancement of conservation amenities.
- Tree protection will be required for the full duration of the construction program from the outset of first occupancy by the main contractor and this should remain in situ up to commencement of landscape works.
- By implementing the scheme with tree protection and due attention to post construction landscaping, the proposal will retain and serve to improve upon existing conservation area tree and garden amenities.

Nick Bentley HNDH, RFS Cert Arb

enc/

- Tree Schedule dated 22<sup>nd</sup> May 2008 (1 page)
- Tree Projects Site Briefing Note dated 2<sup>nd</sup> November 2009 (13 pages)
- Illustration of tree protective barrier to BS 5837 fig 2 (1 page)
- Indicative Tree Protection Plan (1 page)

Tree	e Projects,	BS 5837 Tree Su	rvey.	Sche	dule of	Trees	at: 1	0 Lin	dfield	d Gard	ens									
Date	e: 22nd Ma	ay 2008																		
Wea	ather: Dry/	Bright													-		last filter column			
Тад	Name	Latin	DBH	Stem Cnt	Height	Low C/Hgt	Nth	East	Sth	West	Age	Life Exp	Phys. Cond	Struct. Cond	BS Cat.	Comments	Prelim. Mgt Recom.	RPA m2	RPA radius	RPA square
1	Apple	Malus domestica	140	1	7	2	0	1.5	2.5	2	Y	20-40	Good	Good	C2		No Work Required	8.9	1.7	2.9
2	Apple	Malus domestica	250	1	7	2	2	2	2.5	2	M	20-40	) Good	Good	B2		No Work Required Crown/ lateral reduction to shape and reduce	28.3	3	5.3
3	Apple	Malus domestica	120	1	5	2	0	1	3.5	1	YM	10~20	Good	Fair	C2	Suppressed under T4	weight	6.5	1.5	2.5
4	Leylandii	X Cuprocyparis leylandii	350e	1	8.3	0	2	2	2	2	YM	10~20	) Good	Good	C2	trim to shape and contain as required but outside of nesting season.		55.5	4.2	7.5
5	Leylandii	X Cuprocyparis leylandii	250e	1	6	0	2	2	2	2	ΥM	10~20	) Good	Good	C2	trim to shape and contain as required but outside of nesting season.		28.3	3	5.3
6	Yew	Taxus baccata	525e	1	9	2.5	4	4	4	4	М	404	Good	Good	B2	DBH adjusted as 600 over thick ivy.		125	6.3	11.7
9																				
0		+																		
U																				
		-																		

# TREE PROJECTS BRIEFING NOTE

# Re: 10 Lindfield Gardens, NW3 6PU

To: London Basement Co. London Borough of Camden Arboriculturist.

Subject: Tree Root Investigation

Date: 2<sup>nd</sup> November 2009

- 1.0 **Background**. Planning Application ref Camden 2009/3436 sought to permission to form a basement beneath 10 Lindfield Gardens including formation of light wells and the refurbishment and remodelling to front steps and driveway.
- 1.1 Tree Projects provided an arboricultural statement dated 19<sup>th</sup> January 2009 in support of the application within which it was acknowledged that some elements of work would be within the root protection area of one Yew tree to the front garden protected by TPO. It was judged that the LPA Arboriculturist may require the quantitative assessment of effects of the proposal on tree roots and, that there was sufficient mitigating potential within the proposal that might counterbalance any root loss to merit consideration of the scheme
- 1.2 In pursuit of the assessment of effect on roots, investigations were undertaken by air spade excavation, supplemented by hand digging where appropriate, on 7<sup>th</sup> and 8<sup>th</sup> October 2009. A scaled sketch plan of the extent of excavations was prepared on site and is attached at Appendix 1. Roots of size >25mm diameter were retained and found located in four locations numbered 1 to 4 and shown on the attached sketch plan. Photographs were taken and some are reproduced interspersed to text below, with a complete set of eleven photographs shown at Appendix 2.
- 1.3 The rectangular lines of excavations shown on the sketch plan was set out by Tree Projects on the basis of information supplied by London Basement and, was established to present a fair representation of the maximum extent of construction presented within 2009/3436. Within this line root tagged 1 and 2 were exposed.
- 1.4 Borough Arboriculturist Alex Hutson (LPA Arboriculturist) attended at Tree Projects request to assess progress of works on 7<sup>th</sup> October. At the time of this inspection works had progressed to opening of trench to roots marked 1 and 2 and provided the basis

Nick Bentley Tree Projects Ltd 7, Thurleigh Avenue London

**SW12 8AN** 

M E

07788 726 720 treeprojects@hotmail.com

This report has been produced by Tree Projects for the use of the client under the terms of the contract. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the contract. This report is confidential to the client and we accept no responsibility to third parties who rely on the content at their own risk.

sufficient for objective assessment of application 2009/3436. During conversation on site root 3 was observed to be practically at ground level within the driveway. Excavations thus far had revealed a very significant distinction between rooting within the drive compared to the lawn bed. Tree Projects and LPA Arboriculturist discussed extending extent of investigations to reveal rooting characteristics within the drive. Tree Projects undertook to extend the scope of trench excavation.

1.5 On 8<sup>th</sup> October 2009 Tree Projects returned to site and opened a second trench on a radius that followed the line of the lawn/ ivy covered border in which the Yew tree was centred. This second excavation sought to expose further root 3 and, revealed root 4.

# 2.0 Investigation Results.

2.1 Excavation commenced within the drive at a point closest to the front elevation. Through the existing driveway, the rough surface comprised hoggin (an as-dug clay and washed flint material) to 100mm depth. This is shown as the 'orange' surface layer in photograph 1. This was underlain by road scaplings and large brick and concrete to 300 to 400mm, excavations then continued to depth of 750/ 800mm through clay



Large brick and concrete fragments. Hoggin underlain with scalpings. Close up Photo 2 Close up Photo 3 Close up Photo 4 Close up Photo 5 Close up Photo 6 Photo's 2 to 6 inclusive reproduced at Appendix 2

Photograph 1. Extent of excavations within drive following line of retaining wall shown in 2009/ 3436. Very occasional roots to 5mm with very sparse fibrous root.

2.2 Within the area of excavation in driveway (photographs 1 to 6) very few small roots and sparse fibrous root were observed. What was revealed was seen almost exclusively within the upper 150mm. Contrast this with photograph 7

10 Lindfield Gardens NW3 Tree Root Investigation

Excavations proceeded past the pre-cast concrete edging (PCC in sketch plan) separating driveway from the lawn/ ivy ground cover boarder in which the tree stands. Photograph 7.



- 2.4 Photograph 7 shows roots 1 and 2 and these are considered significant roots, to be Yew, and because of these and the mass of smaller roots excavations were abandoned at around 200mm depth.
- 2.5 Investigations continued within the area of drive shown along the radius of the lawn/ ivy ground cover planting bed. A separating / retaining element is present (possibly PCC edging) Although Ivy obscures. The line of excavation is shown within the sketch plan at Appendix 1 and at Photograph 8. Due to sticky cohesive nature of clay, excavations proceeded largely by excavation by spade with fine work by air spade.

10 Lindfield Gardens NW3 Tree Root Investigation



2.6 Root 3 is a 20mm diameter root arising from the very roughly severed end of one root within a cluster of 3: 30/ 40 and 70mm diameter. (Photo 9). Root 3 grows downwards.



# 10 Lindfield Gardens NW3 Tree Root Investigation

# 2.7 Root 4 is shown at Photograph 11:



### 3.0 Discussion

- 3.1 Rooting intensity is significantly distinct in intensity between areas of driveway and area of lawn/ ivy border in which tree is rooted.
- 3.2 Rooting of the Yew where directly observed is very noticeably shallow, concentrated seemingly exclusively to within the top 250mm of grade.
- 3.3 Roots 1 and 2 are significant and are associated by other dense grouping of smaller Yew roots, observance of which contributed to arboricultural objection to application 2009/3436.
- 3.4 Root 3 originates from a cluster of roots that have been very roughly hacked away. This rough severance is historic and yet, the tree appears in good healthy condition.
- 4.0 Conclusions
- 4.1 The line of proposed construction shown within 2009/3436 would not have resulted in unacceptable root loss where construction would have been located within area of driveway.

- 4.2 The line of proposed construction shown within 2009/3436 would have resulted in an unacceptable severance of roots (1 and 2) where construction would have been located within existing lawn/ ivy covered boarder.
- 4.3 Very rough severance of root 3 has left or given rise to one small live root but, has had no apparent detrimental effect on the Yew tree.
- 4.4 Careful cutting of root 4 seems highly likely not to give rise to a harmful or detrimental effect on the Yew tree in consideration of point 4.3
- 4.5 Cutting of roots will result in re-growth from behind the point of cutting as exemplified by historic severance of root 3.
- 4.6 Any root cutting that may be proposed should be adequately mitigated by cultural improvements where possible.
- 4.7 Construction to address level issues (existing and proposed) and, provision of parking should be designed in order that no loss or curtailment of RPA were to arise.
- 4.8 Construction should be undertaken in a manner and to detailed specifications that foster tree root development.

## 5.0 Recommendations

- 5.1 Revise construction lines of proposed driveway/ parking alterations with arboricultural input.
- 5.2 Prepare detailed section drawings showing construction of retaining walls and driveway specification with arboricultural input.
- 5.3 Seek to liaise with LPA Arboriculturist in light of further findings of the investigation and in respect of drafting details
- 5.4 Be aware that in order to prepare a revised proposal, that a detailed level survey may be required, with levels presented on existing and proposed drawings.

#### **Nick Bentley**

2<sup>nd</sup> November 2009

Tree Projects Briefing Note: 10 Lindfield Gardens NW3 Appendix 1: Sketch Plan

- 9



HOLLIW + SCALPINGS OVER CLAY.

q

1234 SIGNIFICANT LARGE ROOTS.

Tree Projects Briefing Note: Lindfield Gardens NW3 6PU – Tree Root Investigation



Appendix 2 – Photographs – 1 to 11

. . . .

















