

Southstudio

Appendix 2

Tree Survey / Arboricultural Statement
'The Cottage', Spaniards Road, London, NW3 7JH

July 2014

Tree Survey & Arboricultural Report (Stage 1)

At

**The Cottage, Spaniards Road
London, Hampstead Heath
NW3 7JH**

Written By;
Sylvie Gabbey - Landscape Architect

BA(hons) Dip La (hons), Cert. Horticulture (Quebec, Canada), ABC Level 2 Cert.
Arboriculture (Theory)

Of


95 Park Meadow
Old Hatfield
AL9 5HE

On behalf of
UCHI Architecture

April 2011

Summary

The following information is a brief summary of recommendations in relation to the received instructions, the information gathered during the site visit and appraisal as part of this report.

For complete information and detail please refer to the main report.

Tree protection status

We are informed that:

- The site is in a conservation area.

A TPO application form must be completed to seek consent for felling or pruning a tree on The Cottage, Spaniards Road and on adjacent sites.

Summary of recommendations

- Trees to consider for removal – Poor specimens (In a woodland setting these tree could remain with regular monitoring for safety purposes, but as they are located within a private garden they should be considered for removal and replaced with better specimens)

T8	Prunus ceracifera (cherry Plum)	Poorly shaped tree
T11	Acer pseudoplatanus (Sycamore)	Tree growing too close to Cherry group and is rubbing against another tree causing bark wound.
T14	Fagus Sylvatica (Beech)	Tree has an abrupt bend where decay may enter the callus creating a weak area low in the trunk.

- Trees to be monitored

T9	Prunus sp (Cherry)	Potential area of structural weakness cause by branch union at base of tree. Tree should be monitored for signs of decay.
T14	Fagus Sylvatica (Beech)	Potential area of structural weakness cause by wound cavity. Tree should be monitored for signs of decay.
T35-T39	Tilia sp (Lime)	Over-mature trees with poor maintenance history. Trees should be monitored for signs of decay. Potentially dangerous

- Trees to have work done for reasons such as crown reshaping, crown reduction, dead wood removal, stubs removal etc...

T1& T2	Chamaecyparis (Cypress)	Remove stubs and dead branches
T35-T39	Tilia sp (Lime)	Remove dead wood and stubs, require crown reduction and crown reshaping.
T10	Prunus sp (Cherry)	Remove broken branches, dead wood and stubs
T12 & T13	Prunus sp (Cherry)	Remove broken branches, dead wood and stubs
T5 & T6	Ilex aquifolium (common Holly)	Lift canopy to form tree
T7	Quercus sp (Oak)	Prune to re-balance canopy
T8	Prunus ceracifera (Cherry Plum)	Prune to re-shape canopy
T9	Prunus sp (Cherry)	Remove broken branches, dead wood and stubs

See section 3.2, 3.3 and 6 for further details.

Contents

1. Introduction

- 1.1. Instructions
- 1.2. Qualifications and Experience
- 1.3. Documents and Information Provided
- 1.4. Scope of This Report

2. Site Information

- 2.1. Site Visit
- 2.2. Brief Site Description
- 2.3. Site Use
- 2.4. Topography
- 2.5. Amenity

3. Tree Inspection

- 3.1. Tree Observations
- 3.2. Summary of our findings and recommendations
- 3.3. Tree Protection
- 3.4. Relevant references

4. Arboricultural Impact assessment (Stage 2) – Separate document

5. Method Statement (Stage 3) – Separate document

6. Photographs

7. Appendix

Appendix 1; Brief qualifications and experience of Sylvie Gabbey

Appendix 2; Notes on some tree protection issues.

Appendix 3; Understanding BS 5837:2005

Appendix 4; Glossary of Abbreviations & Terms

Appendix 5; Tree Constrain Plan (Reduced copy, NTS)

1. Introduction

1.1. Instructions:

1.1.1. I have been instructed by UCHI Architecture to conduct an arboricultural survey to BS 5837: (2005), on behalf of the client, to inspect the trees at The Cottage, Spaniard Road, Hampstead Heath, NW3 7JH, to provide an Arboricultural report on the condition of these trees including an Impact Assessment and a Method Statement (AMS) in support of a planning application for development.

1.1.2. The Impact Assessment (Stage 2) and the Method Statement (Stage 3) are made separately from this document.

1.2. Qualifications and Experience:

1.2.1. I have based this report on my site observations and the provided information and I have come to conclusions in the light of my experience and technical knowledge.

1.2.2. My qualifications and details of my experience are shown in Appendix 1.

1.3. Documents and Information Provided:

1.3.1. The following documents have been received and relate to the same issues that this report is intended to cover:

Topographical survey by SDP Surveys, S11-200-100

1.4. Scope of This Report:

1.4.1. This report is only concerned with the trees listed as T1 – T42. It includes an assessment based on the site visit and the documents provided, listed in 1.3 above.

1.4.2. This report is designed to accompany a planning application for development proposals at the above site. Its purpose is to assist and inform the planning process according to guidelines laid out in BS 5837: (2005).

1.4.3. This report should not be seen as a substitute for a management plan or a full safety survey.

2. Site Information

2.1. Site Visit

2.1.1. A walk over visual survey of the site and its immediate surrounds was undertaken on 31th of January 2011. All my observations were from ground level without detailed investigations and I estimated all dimensions unless otherwise indicated. If specialist assessment methods are adopted they will be detailed where appropriate. The weather at the time of inspection was raining.

2.2. Brief Site Description:

2.2.1. The site, The Cottage, Spaniards Road, Hampstead Heath, is located in the London Borough of Camden edging Hampstead Heath.

2.2.2. My survey was limited to the area shown in Figure 1. I consider this to be sufficient to assess the impact of the proposed development.

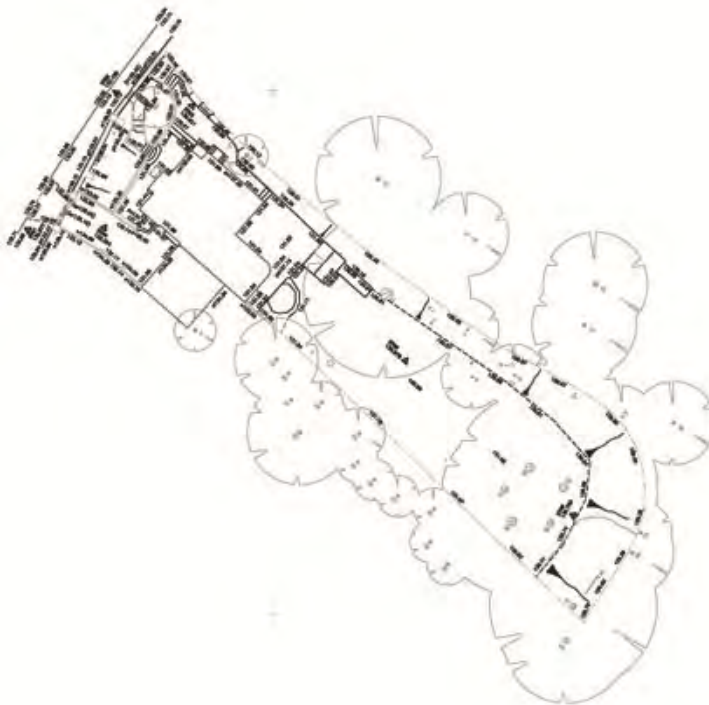


Figure 1: Extent of the survey

2.3. Site Use

2.3.1. The site is residential and comprises one vehicular access and one pedestrian access from Spaniards Road.



Photo 1 – View of the vehicular access looking towards the house, from Spaniards Road gates.



Photo 2 – View of the pedestrian access from Spaniards Road, looking from the house. The view shows the difference in levels of the front garden.

2.4. Topography

- 2.4.1. The site slope from Spaniards Road down to the house by over a metre. The drive slope steeply to reach the garage and the front garden is terraced to allow access to the entrance of the house. The North and East sides of the back garden slope down from the boundary into the neighbouring land.

2.5. Amenity

- 2.5.1. The site is framed with Hampstead Heath woodland on the North and East sides. On the South West side, tall Leyland cypress screen the property from The Spaniards Inn.
- 2.5.2. The tree with the highest visual amenity on the site is the mature *Quercus x hispanica* (Lucombe Oak).



3. Tree Inspection

3.1. Tree Observations:

3.1.1. I visually inspected the trees and recorded the information on the schedule included below; all dimensions given are approximate only.

3.1.2. Note to schedule

- Reference number shown on drawing
- Species are listed in Latin and in common name
- Height describes the approximation of the height of the tree from ground level in metres.
- Stem diameter in centimetres at 1.5m above adjacent ground level.
- Branch spread describes the approximation in metres.
- Age is indicated as Young (Y), Middle Aged (MA), Mature (M) Over Mature (OM) Veteran (V)
- Physiological condition (good, fair, poor, dead)
- Structural condition (good, fair, poor, dead)
- General comments and comments on preliminary management recommendations
- Estimated remaining contribution in years (less than <10, 10-20, 20-40, more than >40)
- Category refers to paragraph 4.3.1 of BS 5837:2005 where A is the most desirable and C the least desirable, with R for removal

Schedule of trees

	Species	Height M (m)	Stem dia. (cm)	Branch Spread (m)	Crown Clearance (m)	Age class	Physio- logical condition	Structural condition	Notes	Recommendations	Life Expectancy	Category grading
T1	Chamaecyparis sp (Cypress)	7	38	N 2 W2 E 2 S 2	-	M	Fair	Fair	Form: Single stem with low branch History: Poor pruning Defects: Numerous stubs and dead branches Others: Planted in terraces/raised bed	Remove stubs and dead branches	10-20	C
T2	Chamaecyparis sp (Cypress)	8	38	N 2 W 2 E 2 S2	4	M	Fair	Fair	Form: Single stem History: Poor pruning Defects: Numerous stub and dead branches present. Others:	Remove stubs and dead branches	10-20	C
T3	X Cupressocyparis leylandii (Leyland Cypress)	9	35	N 2 W 2 E 2 S 2	-	M	Fair	Fair	Form: Single stem History: No clear view Defects: No clear view Others: Located on adjacent land	No action required	10-20	C
T4	Quercus x hispanica (Lucombe Oak) Mix Q. suber x Q cerris	17	114	N 8 W 8 E 8 S 8	6	M	Good	Good	Form: Single stem History: Evidence of maintenance pruning Defects: No significant defect Others:	No action required	>40	A
T5	Ilex aquifolium (Common Holly)	4	15	N 1 W 1 E 1 S 1	-	Y	Fair	Fair	Form: Single stem History: No evidence of maintenance Defects: No leader, shrub like Others: Self seeded	Lift canopy	10-20	C

Tree Ref. no.	Species	Height M (m)	Stem dia. (cm)	Branch Spread (m)	Crown Clearance (m)	Age class	Physio-logical condition	Structural condition	Notes	Recommendations	Life Expectancy	Category grading
T6	Ilex aquifolium (Common Holly)	4	15	N 1 W 1 E 1 S 1	-	M	Fair	Fair	Form: Single stem. History: No pruning, Defects: No clear leader, shrub like Others: Self- seeded, woodland tree	Lift canopy	10-20	C
T7	Quercus sp (Oak)	10	22	N 3 W 3 E 3 S 3	-	Y	Fair	Fair	Form: Single stem. History: Lost of leader Defects: Unbalanced canopy Others: Self-seeded, woodland tree	Re-balance canopy	>40	C
T8	Prunus ceracifera (Cherry plum)	5	15	N 1 W 1 E 1 S 1	-	M	Fair	Fair	Form: Single stem with low branch History: No significant pruning Defects: Poor specimen tree Others:	Remove small lower branches. Consider removing	10-20	C
T9	Prunus sp (Cherry)	11	35	N 2 W 2 E 2 S 2	2	OM	Fair	Fair	Form: Multi stems History: Large callus present Defects: Large stub, twin bole with possible area for decay, curved trunks Others:	Remove broken branches, dead wood and stubs	10-20	C
T10	Prunus sp (Cherry)	10	12	N 1 W 1 E 1 S 1	2	Y	Fair	Fair	Form: Single stem. History: No significant pruning Defects: Broken branches Others:	Remove broken branches, dead wood	10-20	C

Tree Ref. no.	Species	Height M (m)	Stem dia. (cm)	Branch Spread (m)	Crown Clearance (m)	Age class	Physio-logical condition	Structural condition	Notes	Recommendations	Life Expectancy	Category grading
T11	Acer pseudoplatanus (Sycamore)	8	.95	N 1 W 1 E 1 S 1	-	Y	Fair	Fair	Form: Single stem. History: No significant pruning, Defects: Growing too close to cherry tree and rubbing against it Others: Self- seeded, woodland tree	Consider removing	10-20	C
T12	Prunus sp (Cherry)	11	25	N 3 W 3 E 3 S 3	-	M	Fair	Fair	Form: Single stem. History: No significant pruning Defects: Broken branches Others:	Remove broken branches	10-20	C
T13	Prunus sp (Cherry)	9	15	N 2 W 2 E 2 S 2	-	M	Fair	Fair	Form: Single stem. History: No significant pruning Defects: Broken branches Others:	Remove broken branches	10-20	C
T14	Fagus Sylvatica (Beech)	8	12	N 4 W 4 E 4 S 4	-	Y	Fair	Fair	Form: Single stem History: Lost its leader Defects: Curved trunk with possible decay in callus. Others: Poor specimen	Remove small branches growing on trunk. Monitor callus for decay. Consider removing	10-20	C
T15	Quercus sp (Oak)	10	38	N 6 W 6 E 6 S 6	-	M	Fair	Fair	Form: Single stem. History: No significant pruning Defects: Broken branches, unbalanced canopy Others: Located on adjacent land	No action required	>40	C

Tree Ref. no.	Species	Height M (m)	Stem dia. (cm)	Branch Spread (m)	Crown Clearance (m)	Age class	Physio-logical condition	Structural condition	Notes	Recommendations	Life Expectancy	Category grading
T16	Betula pendula (Silver Birch)	12	28	N 4 W 4 E 4 S 4	-	M	Fair	Fair	Form: Single stem. History: No significant pruning, Defects: Leaning tree, dead branches Others: Self- seeded, woodland tree, located on adjacent land	No action required	10-20	C
T17	Quercus sp (Oak)	15	35	N 5 W 5 E 5 S 5	-	M	Fair	Fair	Form: Single stem. History: No significant pruning Defects: No significant defect Others: Self-seeded, woodland tree, located on adjacent land	No action required	>40	B
T18	Betula pendula (Silver Birch)	20	47	N 5 W 5 E 5 S 5	-	M	Fair	Fair	Form: Single stem. History: No significant pruning Defects: No significant defect Others: Self-seeded, woodland tree, located on adjacent land	No action required	10-20	C
T19	Fraxinus sp (Ash)	11	38	N 4 W 4 E 4 S 4	-	M	Fair	Fair	Form: Multi stems History: No significant pruning Defects: No significant defect Others: Self-seeded, woodland tree, located on adjacent land	No action required	<40	C
T20	X Cupressocyparis leylandii (Leyland Cypress)	10	28	N 2 W 2 E 2 S 2	-	M	Fair	Fair	Form: Single stem. History: No significant pruning Defects: No significant defect, limited view Others: Located on adjacent land	No action required	20-40	C

Tree Ref. no.	Species	Height M (m)	Stem dia. (cm)	Branch Spread (m)	Crown Clearance (m)	Age class	Physio-logical condition	Structural condition	Notes	Recommendations	Life Expectancy	Category grading
T21	X Cupressocyparis leylandii (Leyland Cypress)	4	31	N 2 W 2 E 2 S 2	-	M	Fair	Fair	Form: Single stem. History: No significant pruning, Defects: No significant defect, limited view Others: Located on adjacent land	No action required	20-40	C
T22	X Cupressocyparis leylandii (Leyland Cypress)	10	31	N 2 W 2 E 2 S 2	-	M	Fair	Fair	Form: Single stem. History: No significant pruning Defects: No significant defect, limited view Others: Located on adjacent land	No action required	20-40	C
T23	Fraxinus sp (Ash)	10	41	N 5 W 5 E 5 S 5	-	M	Fair	Fair	Form: Single stem. History: No significant pruning Defects: No significant defect, limited view Others: Located on adjacent land	No action required	20-40	C
T24	X Cupressocyparis leylandii (Leyland Cypress)	10	35	N 2 W 2 E 2 S 2	2	OM	Fair	Fair	Form: Multi stems History: No significant pruning Defects: No significant defect, limited view Others: Located on adjacent land	No action required	20-40	C
T25	X Cupressocyparis leylandii (Leyland Cypress)	10	28	N 1 W 1 E 1 S 1	2	Y	Fair	Fair	Form: Single stem. History: No significant pruning Defects: No significant defect Others: Located on adjacent land, limited view	No action required	20-40	C

Tree Ref. no.	Species	Height M (m)	Stem dia. (cm)	Branch Spread (m)	Crown Clearance (m)	Age class	Physio-logical condition	Structural condition	Notes	Recommendations	Life Expectancy	Category grading
T26	X Cupressocyparis leylandii (Leyland Cypress)	10	31	N 2 W 2 E 2 S 2	-	M	Fair	Fair	Form: Single stem. History: No significant pruning, Defects: No significant defect, limited view Others: Located on adjacent land	No action required	20-40	C
T27	X Cupressocyparis leylandii (Leyland Cypress)	9	28	N 2 W 2 E 2 S 2	-	M	Fair	Fair	Form: Single stem. History: No significant pruning Defects: No significant defect, limited view Others: Located on adjacent land	No action required	20-40	C
T28	X Cupressocyparis leylandii (Leyland Cypress)	8	31	N 2 W 2 E 2 S 2	-	M	Fair	Fair	Form: Single stem. History: No significant pruning Defects: No significant defect, limited view Others: Located on adjacent land	No action required	20-40	C
T29	X Cupressocyparis leylandii (Leyland Cypress)	9	35	N 2 W 2 E 2 S 2	-	M	Fair	Fair	Form: Multi stems History: No significant pruning Defects: No significant defect, limited view Others: Located on adjacent land	No action required	20-40	C
T30	X Cupressocyparis leylandii (Leyland Cypress)	9	35	N 2 W 2 E 2 S 2	-	M	Fair	Fair	Form: Single stem. History: No significant pruning Defects: No significant defect, limited view Others: Located on adjacent land	No action required	20-40	C

Tree Ref. no.	Species	Height M (m)	Stem dia. (cm)	Branch Spread (m)	Crown Clearance (m)	Age class	Physio-logical condition	Structural condition	Notes	Recommendations	Life Expectancy	Category grading
T31	Betula pendula (Silver Birch)	9	22	N 3 W 3 E 3 S 3	-	M	Fair	Fair	Form: Single stem. History: No significant pruning, Defects: No significant defect Others: Self- seeded, woodland tree Located on adjacent land	No action required	10-20	C
T32	Quercus sp (Oak)	10	31	N 4 W 4 E 4 S 4	-	M	Fair	Fair	Form: Single stem. History: No significant pruning Defects: No significant defect Others: Self-seeded, woodland tree Located on adjacent land	No action required	>40	B
T33	Betula pendula (Silver Birch)	15	28	N 3 W 3 E 3 S 3	-	M	Fair	Fair	Form: Single stem. History: No significant pruning Defects: No significant defect Others: Self-seeded, woodland tree Located on adjacent land	No action required	10-20	C
T34	Quercus sp (Oak)	10	35	N 4 W 4 E 4 S 4	-	M	Fair	Fair	Form: Multi stems History: No significant pruning Defects: No significant defect Others: Self-seeded, woodland tree Located on adjacent land	No action required	<40	B
T35	Tilia sp (Lime)	25	85	N 9 W 4 E 14 S 9	-	M	Fair	Fair	Form: Single stem. History: Poor maintenance Defects: Broken main branches, hanging dead branches, unbalance canopy Others: Potentially dangerous,	Remove dead branches, reshape canopy by reducing the crown by up to 30%	10-20	C

Tree Ref. no.	Species	Height M (m)	Stem dia. (cm)	Branch Spread (m)	Crown Clearance (m)	Age class	Physio-logical condition	Structural condition	Notes	Recommendations	Life Expectancy	Category grading
T36	Tilia sp (Lime)	25	85	N 7 W 10 E 4 S 7	-	M	Fair	Fair	Form: Single stem. History: Poor maintenance Defects: Dead branches present Others: Unbalance crown	Remove dead branches, reshape canopy by reducing the crown by up to 30%	>20	B
T37	Tilia sp (Lime)	20	70	N 6 W 9 E 3 S 6	-	M	Fair	Fair	Form: Single stem. History: Poor maintenance Defects: Dead branches Others: Unbalance crown	Remove dead branches, reshape canopy by reducing the crown by up to 30%	>20	B
T38	Tilia sp (Lime)	25	85	N 4 W 7 E 7 S 10	-	M	Fair	Fair	Form: Single stem. History: Poor maintenance Defects: Numerous dead branches Others: Unbalance crown	Remove dead branches, reshape canopy by reducing the crown by up to 30%	>20	B
T39	Tilia sp (Lime)	18	63	N 4 W 4 E 4 S 4	-	M	Fair	Fair	Form: Multi stems History: No significant pruning Defects: Dead leader, dead branches and damaged trunk. Others: Unbalance canopy	Remove dead branches, reshape canopy by reducing the crown by up to 30%	<20	C
T40	Quercus sp (Oak)	12	15	N 4 W4 E 4 S 4	-	Y	Fair	Fair	Form: Single stem. History: No significant pruning Defects: No significant defect Others:	Remove any broken branches	<40	C

Tree Ref. no.	Species	Height M (m)	Stem dia. (cm)	Branch Spread (m)	Crown Clearance (m)	Age class	Physio-logical condition	Structural condition	Notes	Recommendations	Life Expectancy	Category grading
T41	Fagus Sylvatica (Beech)	14	57	N 8 W 8 E 8 S 8	-	M	Fair	Fair	Form: Single stem. History: No clear view Defects: No clear view Others: Self- seeded, woodland tree Located on adjacent land	Remove any broken branches	>20	B
T42	Fagus Sylvatica (Beech)	13	54	N 6 W 6 E 6 S 6	-	M	Fair	Fair	Form: Single stem. History: No clear view Defects: No clear view Others: Self-seeded, woodland tree Located on adjacent land	No action required	>20	B

3.2. Summary of our findings and recommendations

3.2.1. The following items are my recommendations in relation to the above facts and opinions. These recommendations are made for management purposes only and are made independently from the development proposals.

- Work must be in accordance with BS 3998:1989
- All work should be done taking account of the Health and Safety at Work Act :1974
- All works must have consent from the planning department.

3.2.2. Trees to be removed for safety

- None at the time of inspection

3.2.3. Trees to be removed for other reasons (Poor specimens) Future removal of these trees should be considered.

- T8 *Prunus ceracifera* (cherry Plum) Poorly shaped tree
- T11 *Acer pseudoplatanus* (Sycamore) is growing too close to cherry group and is rubbing against another tree.
- T14 *Fagus Sylvatica* (Beech) has an abrupt bend where decay may enter the callus weakening the main trunk.

3.2.4. Trees to monitor (Signs of decay)

- T9 *Prunus* sp (Cherry) has potential area of structural weakness cause by branch union and should be monitored for signs of decay.
- T14 *Fagus Sylvatica* (Beech) has potential area of structural weakness cause by wound cavity and should be monitored for signs of decay.
- T35-T39 *Tilia* (Limes) are over-mature trees with poor maintenance and should be monitored for signs of decay.

3.2.5. Trees to have work done for reasons such as crown reshaping, crown reduction, dead wood removal, stubs removal etc...

- T1& T2 *Chamaecyparis* (Cypress) have stubs and dead branches
- T35-T39 *Tilia* sp (limes) Have dead wood, stubs and require crown reduction and crown reshaping.
- T10 *Prunus* sp (Cherry) has broken branches
- T12 & T13 *Prunus* sp (Cherry) have broken branches
- T5 & T6 *Ilex aquifolium* (common Holly) lift canopy to form tree
- T7 *Quercus* sp (Oak) re-balance canopy
- T8 *Prunus ceracifera* (Cherry Plum) re-shape canopy
- T9 *Prunus* sp (Cherry) Remove stubs

3.2.6. Trees to be cleared and re-inspect

- None

3.2.7. Trees with no action required (Located on the site)

- T4 Quercus x hispanica (Lucombe Oak)

3.2.8. Trees with no action required (Located on adjacent land) Please note that trees on adjacent land have not been assess for maintenance purposes.

- T3 X Cupressocyparis sp (Leyland Cypress)
- T15 Quercus sp
- T16 Betula pendula (Silver Birch)
- T17 Quercus sp (Oak)
- T18 Betula pendula (Silver Birch)
- T19 Fraxinus sp (Ash)
- T20-T22 X Cupressocyparis sp (Leyland Cypress)
- T23 Fraxinus sp (Ash)
- T24-T30 X Cupressocyparis sp (Leyland Cypress)
- T31 Betula pendula (Silver Birch)
- T32 Quercus sp (Oak)
- T33 Betula pendula (Silver Birch)
- T34 Quercus sp (Oak)
- T42 Fagus sylvatica (Beech)

3.2.9. Others

- None

3.3. Tree Protection

- The site is in a conservation area.

Trees that have Tree Preservation Orders (TPOs) or that fall within a Conservation Area are protected by legislation that makes it an offence to carry out work on those trees without permission from the council.

A TPO application form should be completed to seek consent for felling or pruning a tree at The Cottage, Spaniards Road and on adjacent sites.

Development Control Form

- Application for tree works: works to trees subject to a tree preservation order (TPO) and/or notification of proposed works to trees in a conservation area. Town and Country Planning Act 1990

We strongly advise that checks are made prior to any tree work is done as fines exist for carrying unauthorised works on protected trees.

3.4. Relevant references

BS 5837:2005 Trees in relation to construction – Recommendations
BS 3998:1989 British Standard Recommendations for Tree

Should you have any queries about this report please do not hesitate to contact me.

Sylvie Gabbey Landscape Architect BA(Hons), Dip La(Hons), ABC 2 Arboriculture
sylviegabbey@virginmedia.com
mobile:07790451553

4. Arboricultural Impact Assessment (STAGE 2 - separate document)

5. Method Statement (STAGE 3 - separate document)

6. Photographs



T1 – *Chamaecyparis* sp (Cypress) showing the terracing and change of levels around the tree.



T2 – *Chamaecyparis* sp (Cypress) showing the proximity of the tree to the existing building.



T3- X *Cupressocyparis leylandii* (Leyland Cypress) adjacent to the house in adjoining land.



T4- *Quercus x hispanica* (Lucombe Oak)



T5& T6- *Ilex aquifolium* (Common Holly)



T5 & T6 Large shrubs/small trees



T7 *Quercus* sp (Oak)



T7- showing unbalance canopy



T8- cherry sp (plum cherry)



T9- cherry sp (cherry)



T9 – showing poor pruning & large stub



T10, T12, T13 Cherry and T11 Sycamore self-seeded trees



T10 Cherry & T11 Sycamore growing too close to each other



T14 *Fagus Sylvatica* (Beech)

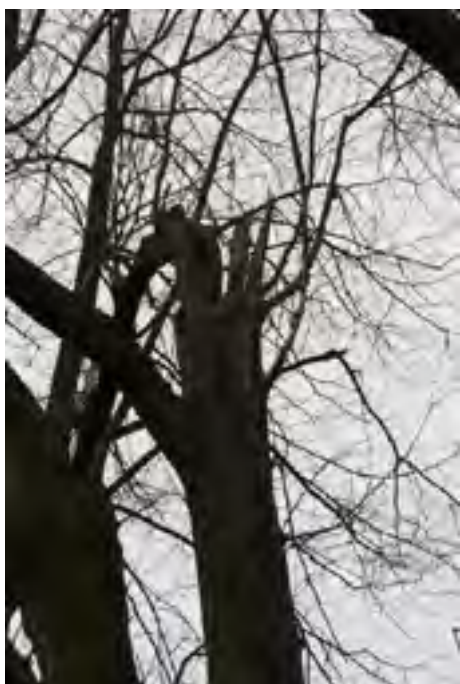


Poor specimen tree with curved trunk and possible decay



T35-T39- *Tilia* sp (lime)

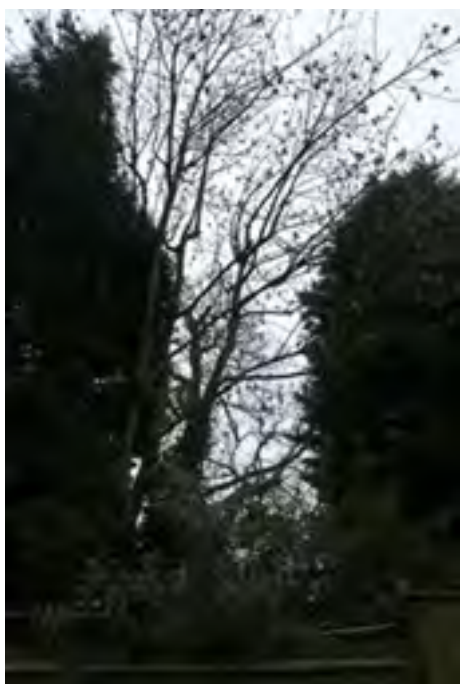




T35- Showing extensive maintenance pruning and decay assessment will be required



T35-T39- Trees planted in a circle



T19- Fraxinus sp (ash)



T20-T30- Row of X Cupressocyparis leylandii on adjacent land



T20-T30- X *Cupressocyparis leylandii* on adjacent land

7. Appendix

Appendix 1; Brief qualifications and experience of Sylvie Gabbey

After qualifying in Horticulture, I worked (1981-1989) for the city of Montreal, landscaping public gardens, supervising a team of gardeners, pruning trees and shrubs, grafting young trees, watering and maintaining flower beds.

After moving to UK I worked (1992-1993) as a plant technician maintaining interior arrangement and offering advice on plants installations.

After qualifying in Landscape Architecture I worked (1995-2008) for a firm of Architects within the landscape division designing external spaces, preparing drawing and specification packages for tender and construction site involvement.

With over twenty year of experiences in horticulture, arboriculture and landscape architecture I now work as a freelance offering a wide range of landscape services including tree survey and report writing.

Experience:	2009-	Freelance Landscape Services
	1995-2008	Landscape Architect
	1992-1993	Plant Technicians
	1980-1989	Gardener (head of team)

Qualifications:

1981 Horticulture

1995 Degree in Landscape Architecture

2000 Diploma in Landscape Architecture

2003 Qualifying examination part 4 - Member of the Landscape Institute (Landscape Design Division)

2010 ABC Cert Arboriculture Level 2 (Theory)

BA (Hons), Dip La (Hons), Certificate in Horticulture (Quebec, Canada)

ABC Cert Arboriculture Level 2

Appendix 2; Notes on some tree protection issues.

Town & Country Planning Act 1990 (as amended 2008);

Your attention is drawn to part VIII of the above Act, sections of this Act are used to apply and enforce TPO's as well as control works carried out on specimens subject to a TPO. As a tree owner before giving instructions to a third party to carry out tree works or carrying out such works yourself you must first ensure that the specimen requiring work is not covered by an order. If a TPO is in force then the prior written permission of the Local Planning Authority enforcing the order must be gained.

If a breach of the TPO is proven the planning compensation act 1991 may be used to enforce penalties, currently the maximum penalty upon conviction is £20,000 as well as costs (including any necessary remedial works). In serious circumstances cases may be committed for trial to the Crown Court and on conviction be liable to an unlimited fine.

Conservation areas;

The law relating to conservation areas is in part II of the Planning (Listed Buildings and Conservation Areas) Act 1990. Conservation areas are areas of special architectural or historical interest the character or appearance of which it is desirable to preserve or enhance. They are designated by the LPAs.

Trees in conservation areas that are already protected by a TPO are subject to the normal TPO controls. However in addition the Town and Country Planning Act 1990 makes particular provision for trees in conservation areas which are not the subject of TPO's. Under section 211, any person proposing to cut down or carry out work on a tree in a conservation area is required to give the LPA 6 weeks notice of their intention to do so Known as a Section 211 notice.

The inclusion of the inspected site within a conservation area will be investigated in the same manner as a TPO by the inspector, and will have been indicated within the general site information of this report. No section 211 notice will be submitted as part of this report however separate arrangements can be made to do so upon request.

Deeds & Covenants;

On occasions contained within the legal documentation of property ownership certain controls are put in force they may for example require the retention of tree cover of a certain variety within the boundary of a property for perpetuity, likewise they may prohibit the planting of certain varieties. It is the responsibility of any party wishing to carry out works to ensure that they are not in breach of such controls.

On occasion, usually with leasehold properties ownership and responsibility for maintenance are retained by the lessor (usually the owner of the deeds) responsibility for checking this information is as above.

Standards of work;

Work recommended within this report is in accordance with British standard 3998 "tree work". This should be considered as a basic minimum standard and any parties carry out arboricultural operations should be able to demonstrate their commitment to that standard.

Appendix 3; Understanding BS 5837:2005

Stage 1: Survey and Report

This identifies the existing trees and gives each a retention category. The categories are allocated independently of development proposal.

Tree Categories

Category A: Identify in light **green colour**

Trees of high quality and value in such condition as to be able to make a significant contribution (a minimum of 40 years is suggested)

Usually mature trees or younger tree with exceptional form. Trees that are particularly a good example of their species, especially rare or unusual.

Retention of these trees is strongly encouraged.

Category B: Identify in **mid blue colour**

Trees of moderate quality and value in such condition as to make a significant contribution (a minimum of 20 years is suggested)

Trees that could be included in the high category but are downgraded because of impaired condition (remediable defects)

Retention of these is desirable though the removal of occasional specimens may be acceptable.

Category C: Identify in **grey colour**

Trees of Low quality and value in adequate condition to remain until new planting can be established (a minimum of 10 years is suggested)

The removal of these trees should generally be seen as acceptable in order to facilitate development.

Category R: Identify in **red colour**

Trees are in such condition that any existing value would be lost within 10 years and should be removed for reasons of sound arboricultural management.

These trees should be removed if the development is to proceed.

Tree Constraint Plan (TCP)

The TCP indicates the location, crown spread, retention category and root protection area (RPA) of each tree. The drawing informs where development may proceed without causing damage to trees.

Stage 2: Arboricultural Impact Study

This report identifies and evaluates the impact that the proposed development may have on existing trees.

Stage 3: Arboricultural Method Statement

This report indicates the necessary methodology required to protect trees from potential damage during the development process.

Appendix 4; Glossary of Abbreviations & Terms.

Arboriculturalist: a person skilled in the science of the care and maintenance of trees they should carry the appropriate liability/ insurance and be preferably be a member of a professional body of tree specialists (the current leading national body is the “Arboricultural association”).

Aspect: The general out look of the site.

BGS: British Geological Survey.

Butt: the lowest part of the trunk where it adjoins the surrounding ground.

C.O.D.I.T: Compartmentalisation of decay in trees, the natural means used by a tree to prevent the spread of decay.

Cavity: a hollow in a wooden part of the tree.

Coupe/Compartment/Copse: a defined area within a woodland or forest.

Covenant: an agreement to maintain or carry out present commitments often contained within the deeds of a property.

Crotch: the junction of two branches.

Crown: The section of the tree which contains leaf/bud covered branches.

D.F.C: distance from construction.

DBH: diameter at breast height, The measurement is taken at 1.3 meters above ground level.

Decay/Rot: the breaking down of the normal structure of the wood, usually leading to the structural weakening of the tree.

Deed: a law contract.

Desiccation: any significant reduction in soil moisture content by evaporation or extraction by trees, shrubs, etc.

Diameter: a straight line passing through the centre of a geometrical shape.

Dog Leg: an unusual growth form where a branch suddenly changes direction. Caused by many different factors but may weaken the integrity of the affected limb

Epicormic Growth: literal meaning ‘upon stem’ forming from adventitious buds. Such branching is often founded on a poor attachment.

Heave: upward ground movement and the corresponding movement of effected foundations.

Illite: one of the three common clay minerals.

Inclinometer: a device using geometry to measure the height of objects.

Increment: a small sample of wood removed for analysis with a boring device.

Kaolinite: one of the three common clay minerals.

L.P.A.: the local planning authority (part of local council).

Montmorillonite: one of the three common clay minerals.

Parasitic: an organism, which will attack its host, usually to the disadvantage of the host.

Pollarding: a method of tree management in which the entire crown is removed at regular periods.

Scaffold: the branch structure in the crown that supports the smaller branches and gives shape to the tree.

Silt: a soil made up of particles with diameters of size intermediate between clay (less than 0.002 mm) and sand (greater than 0.06 mm).

Subsidence: downward ground movement and the corresponding movement of affected foundations.

Suckers: young adventitious shoots growing from the base of the tree or directly from the trunk and main branches.

Target: any item either static or transient that would be hit in the event of any part of the tree failing.

TPO: Tree preservation order.

Trunk: the main supporting portion of the tree, usually bare of twigs and leaves.

Appendix 5; Tree Constraint Plan (Reduced copy, NTS)

Impact Assessment (Stage 2) And Method Statement (Stage 3)

For Development Purposes (BS 5837:2012)

At

**The Cottage, Spaniards Road
London, Hampstead Heath
NW3 7JH**

Written By;

Sylvie Gabbey - Landscape Architect

BA(hons) Dip La (hons), Cert. Horticulture (Quebec, Canada),
ABC Cert Arboriculture, Level 2 (theory)

Of



95 Park Meadow
Old Hatfield
AL9 5HE

June 2014 – Rev A

Summary

The following information is a brief summary gathered as part of this report. For complete information and detail please refer to the main report and also refer to the Tree Survey & Arboricultural Report (Stage 1)

- As long as the tree protection measures specified in Section 5 are enforced, we do not expect any significant arboricultural impact on the health of the retained trees.
- The new residence will comprise a lower ground/basement level containing carers' accommodation, an exercise pool and ancillary areas, with living areas and garage occupying the ground floor level. The first floor accommodates bedrooms and bathrooms. The construction methodology and tree protection measures are detailed in section 5.
- The Tree Protection Plan (Dwg L02) shows in orange hatch the affected areas of trees T4, and neighbouring trees T19, T20, T22 & T24 where work within the tree protection area (RPA) is necessary to allow for the excavation of the new proposed extension.
- The footings of the building will use a pile and beam system, designed to avoid major roots. Piles as small as possible will be used in accordance with Engineers specification.
- Excavation within the RPA of T4, T19, T20, T22 & T24 for the construction of the extension shall be carried out carefully by hand. The construction methodology is detailed in section 5.
- T1 & T2 are required to be removed for the construction of the new house layout. Both trees are category C with low quality and value.
- It is proposed to remove the area of low quality trees from T5, T6 (both large shrubs/small tree holly), T7 self-seeded oak with unbalanced canopy growing under the category A Lucombe Oak, T8, T9, T10, T12, T13 (all cherries), and T11 self-seeded sycamore. Their removal is not necessary for the construction of the house but there is an opportunity to remove poor specimens and add new trees.
- Three No. silver birch trees are proposed to replace in lieu of the existing poor quality trees to be removed. Due to the existing large Lucombe Oak and the 5 No. lime trees which provide extensive shade, as well as the site being surrounded by woodland which contribute to the garden feeling closed in, it is proposed to keep the new trees to a minimum.

Tree protection status

We are informed that the site is in a conservation area.

A TPO application form must be completed to seek consent for felling or pruning a tree on the site at the Cottage, Spaniard Road and on adjacent sites.

Contents

- 1. Introduction** (Stage 1) not included, separate document
- 2. Site Information** (Stage 1) not included, separate document
- 3. Tree Inspection** (Stage 1) not included, separate document
- 4. Arboricultural Impact assessment**
 - 4.1. Outline of the Development
 - 4.2. Impact of Tree Loss
 - 4.3. Impact of Tree Pruning
 - 4.4. Mitigation Planting
 - 4.5. Impact of General Construction Activity
 - 4.6. Impact of Demolition / Removal of Surfaces
 - 4.7. Impact of Changes in Ground Levels
 - 4.8. Impact of changes in Ground Surfaces
 - 4.9. Impact of the Proposed Extension
 - 4.10. Foundation and Floors
 - 4.11. Services and Drainage
 - 4.12. Hazardous Materials
 - 4.13. Effect of Retained Trees on the development
 - 4.14. Summary

5. Method Statement

Pre construction phase

- 5.1. Tree works
- 5.2. Protective Fencing
- 5.3. Special tree trunk protection of T4
- 5.4. Special Ground Protection Measures
- 5.5. Supervision and Reporting
- 5.6. Contingency Plans

Construction Phase

- 5.7. Removal of Hard Surfaces
- 5.8. Foundation and Level Grading
- 5.9. Use of Heavy Plant
- 5.10. Underground Services
- 5.11. Siting of Cabins
- 5.12. Storage of Materials
- 5.13. Hazardous Materials
- 5.14. Ground Level Changes
- 5.15. Scaffolding

Post Construction Phase

- 5.16. Removal of Fencing
- 5.17. Landscaping
- 5.18. Tree Works

- 6. Photographs** (Stage 1) not included, separate document
- 7. Appendix** (Stage 1) not included, separate document
- 8. Appendix** (Stage 2&3)
 - 8.1.** Tree Protection Plan (NTS, reduced copy)

To be read in conjunction with Tree Survey & Arboricultural Report (Stage 1)

- 1. Introduction** (Stage 1) separate document
- 2. Site Information** (Stage 1) separate document
- 3. Tree Inspection** (Stage 1) separate document
- 4. Arboricultural Impact assessment**

4.1. Outline of the Development

- 4.1.1. The new residence will comprise a lower ground/basement level containing carers' accommodation, an exercise pool an ancillary areas, with living areas and garage occupying the ground floor level. The first floor accommodates bedrooms and bathrooms.

4.2. Impact of Tree Loss

- 4.2.1. T1 & T2 are proposed to be removed for the purposes of development. Both are low category trees; T2 is growing too close to the existing house, and it is also not suitable to retain T1 as the stepped access to the house will be re-built and re-graded.



T2 – Tree is growing too close to the existing building



T1 – Stepped entrance require re-building and re-grading.

- 4.2.2. It is also proposed to remove the area of low quality trees growing under and adjacent to the category A Lucombe Oak. From T5, T6 (both large shrubs/small tree holly), T7 self-seeded oak with unbalanced canopy, T8, T9, T10, T12, T13 (all cherries), and T11 self-seeded sycamore. Their removal is not necessary for the construction of the house but there is an opportunity to remove poor specimens and add new trees.

4.3. Impact of Tree Pruning

- 4.3.1. No trees pruning is required for the purpose of development but the tree schedule in the Tree survey & Arboricultural Report (Stage 1) shows tree pruning recommendation for maintenance purposes.

4.4. Mitigation Planting

- 4.4.1. Two trees must be removed as part of this development, however another 9 low quality and value trees are proposed to be removed (total 11 No.) To compensate the loss of these low quality trees 3no. new trees are proposed. Three No. silver birch trees are proposed to replace in lieu of the existing poor quality trees to be removed. Due to the existing large Lucombe Oak and the 5 No. lime trees which provide extensive shade, as well as the site being surrounded by woodland which contribute to the garden feeling closed in, it is proposed to keep the new trees to a minimum.

4.5. Impact of General Construction Activity

- 4.5.1. Tree protection measures are specified in section 5 of the method statement to ensure that the impact of the construction activities is minimal.
- 4.5.2. Any work within the Root Protection Area shall be done by hand to minimise damage to the existing trees.

4.6. Impact of Demolition / Removal of Surfaces

- 4.6.1. Any work within the Root Protection Area shall be done by hand to minimise damage to the existing trees.
- 4.6.2. Care will be required when existing hard landscape will be removed as the RPA of T4 cannot be fenced off completely.
- 4.6.3. The areas dashed in orange on the Tree Protection Plan indicate where the root protection area of these trees lies outside of the protective fencing. Care must be taken to ensure that no excavation, soil compaction or ground contamination take place in these areas.

4.7. Impact of Changes in Ground Levels

- 4.7.1. No changes of level within the RPA of existing trees is proposed. A new suspended path adjacent to the house will be built on posts and frame to accommodate the sloping ground.

4.8. Impact of changes in Ground Surfaces

- 4.8.1. The new construction should have minimal impact on the existing trees as long as the tree protection measures are followed.

- 4.8.2. All ground surfaces are to remain the same or similar in properties (permeable) for most of the trees except for T4 which will have a portion of its RPA built over by the new extension.
- 4.8.3. The RPA of T4 is calculated as 594m² in area, of which 88m² (15%) is proposed to be built over by the new extension.
- 4.8.4. The adjacent trees T19, T20, T22 T T24 will also have a small portion of their RPA built over.



Photograph showing existing area of existing decking adjacent to T4.

4.9. Impact of the Proposed Extension

- 4.9.1. The construction of the new extension should have no impact on the existing trees as long as the tree protection measures are followed.

4.10. Foundation and Floors

- 4.10.1. The excavation within the RPA of T4 should be done carefully by hand to avoid any damage to the roots.
- 4.10.2. Piles and beams technique will be used to minimise impact on the existing trees.

4.11. Services and Drainage

- 4.11.1. Underground services are to be installed outside the RPA (Root Protection Area) so that there should be no arboricultural impact from services.

4.12. Hazardous Materials

- 4.12.1. All hazardous materials are to be controlled to ensure that there is no detrimental impact on tree health.

4.13. Effect of Retained Trees on the development

- 4.13.1. Most of the existing trees to be retained are situated at sufficient distance from the proposed development so that future growth will not affect the new extension.
- 4.13.2. Part of the new extension is proposed to be built underneath T4's canopy but as the tree's main lower branches are located over the Heath, the branches are not conflicting with the new built.



T4 – Lowest branches are located over Hampstead Heath, away from the new extension.

4.14. Summary

- 4.14.1. As long as tree protection measures are implemented as per section 5, there shall be no significant arboricultural impact of the development

5. Method Statement

This section details all of the tree protection measures to be adopted in order to protect the tree to be retained.

Pre construction phase

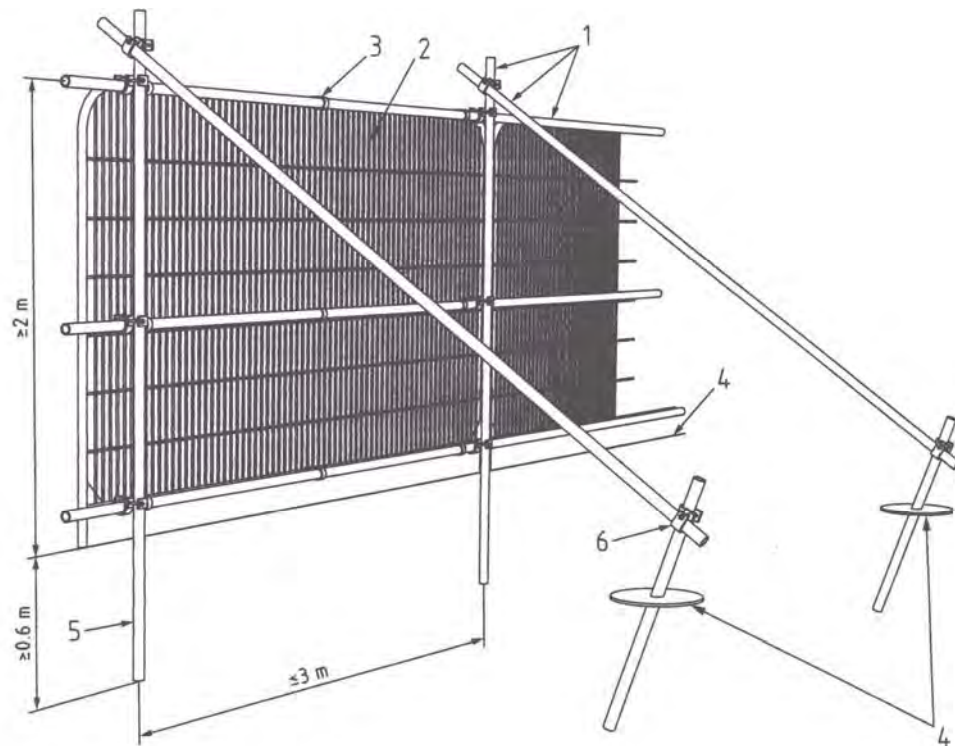
5.1. Tree works

- 5.1.1. Before works commence and before any materials or machinery are brought onto the site the tree protection fence will be erected to form the construction exclusion zone and will be maintained throughout the construction period.
- 5.1.2. All tree work should comply with BS3998. All arisings shall be removed from the site unless otherwise specified. The Local Authority Tree Officer shall be informed of the intended date

of works and invited to inspect the works following completion.

5.2. Protective Fencing

- 5.2.1. The protective fencing needs to be installed in accordance with the Tree Protection Plan.
- 5.2.2. In ground system to form the exclusion zone.
- 5.2.3. Protective fence (in ground system) will consist of a scaffold framework in accordance with BS 5837:2012 which comprise a vertical and horizontal framework, well braced to resist impact, with vertical tubes spaced at a maximum interval of 3m. Onto this, weldmesh panels will be securely fixed with wire or scaffold clamps. Weldmesh panels on rubber or concrete feet are not resistant to impact and should not be used.



Example of protective fencing

- Standard scaffold poles
- Uprights to be driven into the ground
- Panels secured to uprights with wire ties and where necessary standard scaffold clamp
- Weldmesh wired to the uprights and horizontals
- Standard clamps
- Wire twisted and secured on inside face of fencing to avoid easy dismantling
- Ground level
- Approx. 0.6m driven into the ground
- BS 5837:2012 – Protective barrier

5.2.4. Once erected the barriers should be regarded as sacrosanct, and should not be removed or altered without prior recommendation by an Arboriculturalist and approval of the local planning authority.

5.2.5. Once the protective barriers have been erected an all weather notice will be erected on the barrier indicating 'Construction exclusion zone – Keep out'. The notice should list all restrictions as listed below. These restrictions shall apply to the fenced off area

- No construction activity at all in this area
- No tree works without the written consent from the council
- No change in ground levels or conditions
- No chemical or cement washings
- No excavations
- No temporary structures
- No storage of soil, rubbles, or other
- No vehicles or machinery to be used or parked
- No fixtures (signs, lighting, etc) attached to trees.
- No fires within 10 metres of the canopies of trees or hedge.

5.2.6. The 'Strut and Block-tray' System

Panels with anti-climb mesh (2x3.5m standard.) linked with anti-tamper couplings, concrete blocks feet secured with soil pins, struts to stabilise the fence with bloc tray loaded with concrete blocks or sandbags every third panels to prevent the fence to be moved.

5.2.7. The 'Heras Steadfast Systems'

Panels with anti-climb mesh, high visibility blocks with small struts increase the stability of the fence and prevent lifting. Soil pins prevent easy movement of the feet and anti-tamper coupler can only be removed with the use of a specialist tool.



- 5.2.8. Where tree crowns overhang the provisional position of tree protection barriers, an assessment by an Arboriculturalist will be done to determine whether it may be necessary to increase the area of protection or determine the extent of pruning.
- 5.2.9. It is not practical to completely fence off all of the RPAs of trees T4, T19, T20, T21, T22 & T24. The areas dashed in orange on the Tree Protection Plan indicate where the root protection area of those trees lies outside of the protective fencing. Care must be taken to ensure that no excavation, soil compaction or ground compaction take place in these areas.

5.3. Special tree trunk protection of T4

- 5.3.1. The tree trunk of T4 is to be enclosed with a timber stud frame sheathed in 18mm ply to form hoarding of 2.4m height. This hoarding is to enclose the trunk for protection.

5.4. Special Ground Protection Measures

- 5.4.1. If necessary to have pedestrian movement within the RPA the installation of the ground protection will be required.
- 5.4.2. In order to avoid compaction, disturbance and contamination protective boards shall be used. 18mm shuttering ply shall be secured to timber supports. The space between the boards and the ground level shall be filled with woodchip (50mm).
- 5.4.3. The boards shall remain secure throughout the entire construction phase. They shall be installed before commencement of all construction activity and shall be removed only when all construction is completed.

5.5. Supervision and reporting

- 5.5.1. The developer, site manager and Arboriculturalist must meet on site before any development activity begins to confirm the timing and implementation of the agreed tree works and the installation of the tree protection measures.
- 5.5.2. A suitably competent Arboriculturalist is to make regular site visits, at intervals of not more than 14 days (to be determined at the pre-commencement site meeting which is also to determine the manner in which those visits are to be recorded and logged), to confirm that the protection measures agreed and employed are functional and achieving their purpose and to liaise with the LPA's Arboriculturalist and agree any changes or revisions that may be necessary, before they are implemented.

5.6. Contingency Plans

- 5.6.1. In the event of unforeseen incidents occurring, that may adversely affect or threaten the welfare or security of the trees, the resident site agent/Manager shall inform the Arboricultural consultant at the earliest opportunity and not more than one working day following incident.
- 5.6.2. Incidents which may merit such contingency plans include:
 - Accidental/unauthorised damage to the limbs, roots or tree trunks
 - The spillage of chemicals within or adjacent to a Root Protection Area
 - The discharge of toxins/waste within or adjacent to the Root Protection Area

Construction Phase

5.7. Removal of Hard Surfaces

- 5.7.1. Only hand tools shall be use to remove hard surfaces within the RPA (Root Protection Area) and no excavation shall take place other than what is required to remove the surface and sub base.

5.8. Foundation and Level Grading

- 5.8.1. No re-grading shall take place within the RPA
- 5.8.2. The footings of the building will use a pile and beam system, designed to avoid major roots. Piles as small as possible will be used in accordance with Engineers specification.
- 5.8.3. On-site investigation will (using a mix of hand-digging and air spade methods) identify the location of major root systems to produce a plan of on-site roots.
- 5.8.4. The air-spade will be used in the presence of an appointed consulting Arboriculturalist.
- 5.8.5. Piles as small as possible will be used.
- 5.8.6. The Engineer/Architect shall then produce a piling plan that respects the tree root system on site.
- 5.8.7. The floor surface, made of suspended floors, beams or slabs, will be supported by the piles at or above ground level.
- 5.8.8. No excavation will be carried out within the RPA of the tree.
- 5.8.9. Excavations which have to be undertaken within the Tree Protection Area for the foundation should be carried out carefully by hand. If roots are found they should be wrapped in dry clean Hessian sacking to prevent desiccation and to protect from sudden change in temperature.
- 5.8.10. Roots smaller than 25mm diameter may be pruned back to a side branch, but roots larger than 25mm should only be cut following consultation with an Arboriculturalist as they may be essential to the trees health and safety.

- 5.8.11. Any hessian wrapping must be removed prior to back-filling and roots should be surrounded with sharp sand (not builders sand as its salt content is toxic to the roots) before soil is replaced.

5.9. Use of Heavy Plant

- 5.9.1. All machinery shall only operate outside of the Tree Protection Areas.

5.10. Underground Services

- 5.10.1. Underground services and drains are to be routed to avoid the Root Protection areas of all trees so no specialist techniques are required.

5.11. Siting of Cabins

- 5.11.1. All cabins and site services are to be positioned outside the Tree Protection Zone at the front of the property.

5.12. Storage of Materials

- 5.12.1. All building materials and spoil heaps shall be located outside the Tree Protection Zone at the front of the property.

5.13. Hazardous Materials

- 5.13.1. All mixing of cement based materials is to take place outside Tree Protection Zone. Provision shall be made to ensure that no water runoff enters the RPA (Root Protection Area). Special care shall be taken as the site slope down towards existing trees.
- 5.13.2. All other chemicals hazardous to tree health, including petrol and diesel are to be stored in suitable containers as specified by COSHH Regulations 2002, and kept away from the RPA (Root Protection Area). All storage of chemicals should be kept at the front of the property.
- 5.13.3. Cleaning water shall be left in containers for at least 24 hours so that cement products may settle and clean water may be poured out. The cleaner water may be poured into holes at least 3m beyond any RPA (Root Protection Area). Cement residue shall be removed from site. Any cleaning water shall be poured at the front of the property.

5.14. Ground Level Changes

- 5.14.1. No ground changes in excess of 100mmm are to take place anywhere within the RPA.

5.15. Scaffolding

- 5.15.1. Care is required when erecting scaffolding close to trees. Ground protection measures shall be implemented.

Post Construction Phase

5.16. Removal of Fencing

- 5.16.1. This will be done after all major construction work is complete.
- 5.16.2. The local authority Tree Officer should be made aware that the fencing is to be removed.

5.17. Landscaping

- 5.17.1. No machinery used within landscaping operations is to operate within the RPA (Root Protection Area).

5.18. Tree Works

- 5.18.1. No remedial tree works are anticipated since the trees are to be well protected. However, the trees should be inspected after the construction phase in case any unforeseen damage has occurred so that remedial works may be commenced.

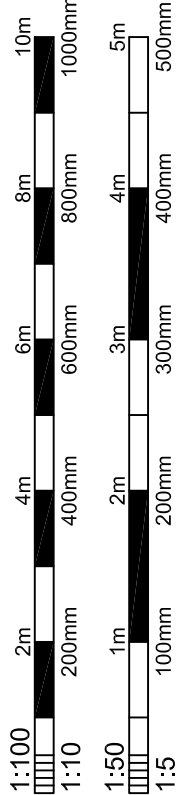
6. Photographs (Stage 1) not included, separate document

7. Appendix (Stage 1) not included, separate document

8. Appendix (Stage 2&3)

- 8.1. Tree Protection Plan (NTS, reduced copy) Dwg L002

DO NOT SCALE - ASK FOR DIMENSION
USE ONLY FOR PURPOSE INDICATED BELOW



SCALE BARS FOR MICROFILM PURPOSES ONLY

KEY



Category A tree
High quality & value



Category B tree
Medium quality & value



Category C tree
Low quality & value



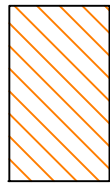
Category R tree
Remove



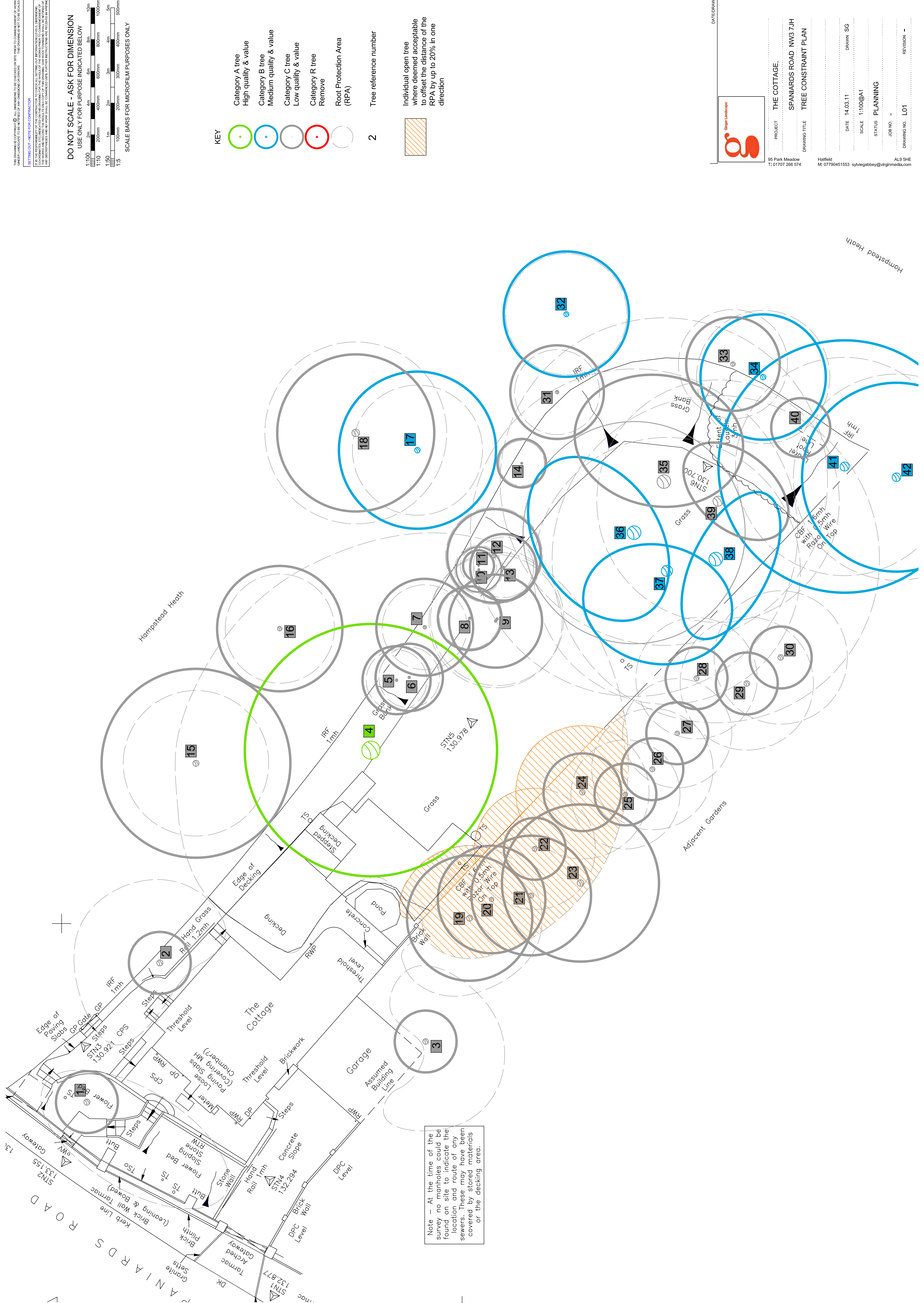
Root Protection Area
(RPA)

2

Tree reference number



Individual open tree
where deemed acceptable
to offset the distance of the
RPA by up to 20% in one
direction



DATE/DRAWN



95 Park Meadow
T: 01707 266 574

PROJECT THE COTTAGE,
SPANIARDS ROAD NW3 7JH
DRAWING TITLE TREE CONSTRAINT PLAN

Hatfield
M: 07790451553 sylviagabbey@virginmedia.com

AL9 SHE
REVISION -

USE ONLY FOR PURPOSE INDICATED BELOW

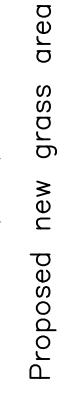
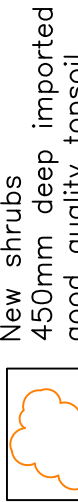


Note – At the time of the survey no manholes could be found on site to indicate the location and route of any sewers. These may have been covered by stored materials or the decking area.

USE ONLY FOR PURPOSE INDICATED BELOW



SCALE BARS FOR MICROFILM PURPOSES ONLY



Species Latin name (Common name)	Rootball Pots	Girth	No/ sq m	Height cm	Nos.
Amelanchier lamarkii (Juneberry)	RB	10-12cm	As shown	200-300	1
Betula pendula (Silver Birch)	RB	10-12cm	As shown	200-300	3
Clematis vitalba (Old mans beards)	3L	-	every 1000mm	100	31
Convulvulus cneorum (Silverbush)	5L	-	5	30	7
Hebe 'red edge' (Hebe)	5L	-	5	30	11
Lavandula 'Hidcote' (Lavander)	5L	-	5	30	15
Rosmarinus officinalis (Rosemary)	5L	-	5	30	9
Taxus baccata (Yew)	RB	-	every 400mm	150	33
					110

95 Park Meadow
T: 01707 266 574

Hatfield AL9 5HE
M: 07790451553 sylviegabbey@virginmedia.com

