

Arboricultural Survey to British
Standard B.S. 5837: 2012 “Trees in
Relation to Design, Demolition and Construction –
Recommendations

At

**42 Church Road
Hayling Island
Hampshire
PO11 0NT**



Prepared by

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Date

9 May 2012

Revised 29 October 2012

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1. Introduction

1.1 I have worked in horticulture for over forty years. I started my career as an apprentice gardener with the Royal Parks Hampton Court. I worked at Portsmouth for nine years and Fareham for two in a supervisory capacity. I then moved to Southampton Council as a Parks Officer responsible for half the cities parks and open spaces. Whilst at Southampton I wrote the detailed Grounds Contracts that have been used by many other authorities. In April 2006, I took early retirement after fifteen years with Winchester City Council as their Parks and Recreation Officer. Responsible for all grounds contracts across the Winchester District. Since my retirement, I started my own landscape design and consultancy business where I can draw on forty seven years of experience in all areas of Horticulture.

2. The Brief

2.1 I have been instructed by Mrs Theresa Thomas to carry out a Tree Survey; provide professional advice i.e. root protection areas in line with B.S. 5837:2012 and prepare an Arboriculture report to support a planning application for the land at 42 Church Road Hayling Island PO11 0NT.

3. Caveats

3.1 There are only two trees on the site each has been tagged with a metal tag giving them their own unique number for ease of identification (436, 437) and their position marked on the Tree Survey Plan 0154-12.

3.2 The remaining trees shown on the Tree Survey Plan 0154-12 are in neighbouring properties and have been give their own unique numbers (T1 to T6) for ease of reference. These have been surveyed because of their close proximity to the proposed development site.

3.3 On the southern boundary in the neighbouring property is a group of Poplars which have all been given the number of T3 for ease of reference and shown on the Tree Survey Plan 0154-12.

3.5 T436 (Grey Poplar) and T2 (Sycamore) have Tree Preservation Orders (No 1782 and No1783 respectively) placed on them by Havant Borough Council in April 2002.

3.6 The trees were surveyed from ground level, with binoculars being used where considered appropriate. Detailed inspection including aerial investigation (climbing the tree) decay mapping, root or soil analysis was not undertaken, and deemed not to be required on visual inspection of the trees.

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4. Survey Date

4.1 I originally surveyed the trees in May 2010 but due to the time lapse and the changes brought about by BS5837:2012 Trees in relation to design, demolition and construction – Recommendations I therefore re-surveyed the trees at 42 Church Road Hayling Island on 8 May 2012 the weather was over cast with a slight breeze.

5. The Site.

5.1 42 Church Road is a detached bungalow standing in its own grounds with a small front garden but with a large rear garden mainly laid to grass. On the right had side of the

garden is a large shed and some areas laid to concrete, whilst on site these were being removed. There is an entrance into the rear garden from Kings Road which runs between the Scout Hut and neighbouring rear gardens. Within the garden there are two large trees a Grey Poplar and Sycamore. There is however a number of trees in neighbouring gardens which I was only able to assess from 42 Church Road I have estimated their Root Protection Areas and included them in my report.

6. The Tree Survey

6.1 In carrying out the tree survey, the following was assessed for each tree in line with BS5837:2012 Trees in relation to design, demolition and construction – Recommendations

Dimensions: height estimated to the nearest metre, crown spread, (measurements taken north/south/east/west), existing canopy height above ground level to first significant branch and stem diameter taken at 1.5m above ground level. Where measurements have been estimated due to access restrictions they are preceded with #

7. Species

7.1

TPO No	TREE REF	Common Name	Scientific Name	NO OF TREES	LOCATION
	T1	Grey Poplar	Populus x canescens	1	Rear of 40 Church Road
1783	T2	Sycamore	Acer pseudoplatanus	1	Rear of 125 Kings Road
1782	T436	Grey Poplar	Populus x canescens	1	Rear garden 42 Church Road
	T437	Sycamore	Acer pseudoplatanus	1	Rear garden 42 Church Road
	T3	Grey Poplar	Populus x canescens	Group	Southern boundary 42 Church Road
	T4	Field Maple	Acer campestre	1	Southern boundary 42 Church Road
	T5	Sycamore	Acer pseudoplatanus	1	Southern boundary 42 Church Road
	T6	Ash	Fraxinus excelsior	1	Southern boundary 42 Church Road

8. Age

8.1 An estimate of the tree age is given where Y= young tree within first quarter of its life expectancy, SM = semi mature tree in its second quarter of its life expectancy EM = early mature tree within third quarter of its life expectancy. M = mature tree within final quarter of its life expectancy OM = over mature tree beyond life expectancy.

9. Condition

9.1 Tree condition summary is shown as: - Good, tree with no visible significant health defects. Fair, some visible remedial defects. Poor, serious visible structural defects or poor health.

10. Future Management Recommendations

10.1 Work required to trees for reasons of sound arboricultural management. This provides management recommendations for trees in their current context and may include the further investigation of suspected defects.

11. Retention span

11.1 Estimated remaining contribution based on species, condition and species, condition and context. The following longevity bands are used: <10; 10+ 20+ and 40+

12. Tree categorization method

12.1 Quality and value classification where:-

- Category U= Trees in such a condition that they can not realistically be retained as living trees in the context of the current land use for longer than ten years and should be removed for reasons of sound arboricultural management. Trees in this category are shown in dark red on the tree survey plan
- Category A= Trees of high quality and value and in such condition that they are likely to make a useful contribution for 40 years or more. Trees in this category are shown in light green on the tree survey plan
- B= Trees of moderate quality and value and in such a condition that they are likely to make a useful contribution for at least 20 years. Trees in this category are shown in mid blue on the tree survey plan
- C= Trees of low quality and value or of no particular merit and in such a condition that they are likely to make a useful contribution for 10 years or young trees diameter below 150mm. Trees in this category are shown in grey on the tree survey plan

12.2 Trees in the A B and C categories are also assessed under three headings (1) Mainly arboricultural qualities (2) Mainly landscape qualities (3) Mainly cultural values including conservation. Further detail on these categories can be found on page 9 Table 1 of BS 5837:2012.

Tree No	Species	Height m	Dia at 1.5m (cm)	Crown Spread (m)	Crown Clearance (m)	Dia of RPA (m)	RPA (M sq)	Age Class	Comments Structural and physiological condition	Preliminary Management considerations	Estimated remaining contribution (Years)	Category rating
T1	Poplar	19		#N 3 #E 5 #W 5 #S 3	6 W #	#5	#15.7	EM	Fair physiological condition Fair structural condition Three trees growing in close proximity off site in neighbouring garden		20+	B
T2	Sycamore	15	#30 #25	#N 5 E 6 W 5 S 5	5 E	3.90	12.26	M	Fair physiological condition Fair structural condition Trunk splits at 1.5m Naturally regenerated specimen		20+	B
T436	Poplar	18	50 55	#N 7 #E 5 W 8 S 5	5 S	7.43	23.35	M	Fair physiological condition Fair structural condition Multi stemmed 2 main leaders from base	Reduce height to lessen load on some of the over extended limbs	20+	B
T437	Sycamore	16	35 35 35	N 5 #E 5 W 5 S 5	3 S	6.06	19.04	EM	Fair physiological condition Fair structural condition Multi stemmed 3 main leaders from base	Reduce height to lessen load on some of the over extended limbs	20+	B

Tree No	Species	Height m	Dia at 1.5m (cm)	Crown Spread (m)	Crown Clearance (m)	Dia of RPA (m)	RPA (M sq)	Age Class	Comments Structural and physiological condition	Preliminary Management considerations	Estimated remaining contribution (Years)	Category rating
T3	Poplar	18	Group #20	N 6 E – W – S -	8 N	#2.4	#7.5	EM	Fair physiological condition Fair structural condition Group of #20 trees all Poplars forming small copse.		20+	B
T4	Field Maple	15	#20	N 3 E 4 W 3 # S 4	5 N	#2.4	#7.5	EM	Fair physiological condition Fair structural condition		20+	B
T5	Sycamore	13	# 10 # 15 # 10	N 5 E – W – S -	6 N	2.0 6	6.47	EM	Fair physiological condition Fair structural condition Multi stemmed 3 main leaders from base		20+	B
T6	Ash	9	#20	N 3 E – W – S –	8 N	2.4	7.5	SM	Fair physiological condition Fair structural condition		20+	B

13. Observations

- 13.1 T3 Sycamore which is covered by TPO1783 and stands on the boundary with 125 Kings Road splits at 1.5m to form two strong leaders. I would say this is a natural regenerated specimen which has been left to grow. The roots of the tree do encroach into the site and would therefore require protection as set out in BS5837: 2012.



- 13.2 T436 Poplar which is covered by TPO1782 and stands in the north east corner of the site would require some formative pruning. The tree is in competition with T437 which is causing the crown of the tree to become misshapen. There is a large branch going out over the neighbouring property in Kings Road and for safety reasons should be reduced to rebalance the tree. Prior to any work being undertaken permission for any works to the tree would be required from Havant Borough Council due to its Tree Preservation Order status.



- 13.3 T4 which is a group of Poplars on the southern boundary in the neighbouring property are mainly poles with a small canopy some 8m from the ground. The RPA has been estimated by using the estimated diameter of the tree nearest the boundary. As shown on tree survey plan 0154-12 there is root encroachment into the site with protection as set out in BS5837-2012 the trees will not be affected by this proposed development.



- 13.4 There is within this proposed new development scope to carry out further landscaping and tree planting which would enhance the scheme. All trees and plants selected should be chosen for their suitability for the site to give the desired effect.
- 13.5 For all required tree surgery, a competent arboricultural contractor should be used; Works should be carried out in accordance with B.S. 3998 "Recommendations for Tree Work" 2010

14. Appraisal

- 14.1 The proposed new development has been designed to ensure that there is limited encroachment into the Root Protection Areas, whether they are on site or in neighbouring properties. Measures will be taken to ensure that where there is encroachment into the RPAs that working practices as set out in BS 5837:2012 are adhered to.

- 14.2 Prior to any construction work the trees will be protected by a fence in line with BS 3837:2012 Trees in relation to design demolition and construction- Recommendations. On completion of building works the fence will be removed.

15. Conclusions

- 15.1 It is concluded that it is practical and economically possible to construct the proposed development. There are no significant trees that would be lost to this proposed development. Trees to be retained can be protected by the provision of fencing in accordance with B.S.5837:2012 Trees in Relation to Design Demolition and Construction- Recommendations.
- 15.2 The calculation of the root protection areas is recommended by British Standards B.S.5837:2012 Trees in Relation to Design Demolition and Construction- Recommendations gives the appropriate distance for protective fencing from the trees. I have indicated this on the attached Tree Survey Plan 0154-12 along with areas that are affected and the measures that will be taken to safeguard the longevity of the trees in question.

Method Statement

42 Church Road
Hayling Island
P011 0NT

1. Introduction

- 1.1 This Method Statement has been prepared by Nigel Trowell on behalf of Mrs Theresa Thomas and should be read in conjunction with the submitted Arboricultural Survey.
- 1.2 The Method Statement recommends that the planned development on this site is carried out in accordance with BS5837:2012 Trees in relation to design, demolition and construction – recommendations
- 1.3 The developer has agreed to undertake tree protection to the standard advised in the Method Statement.
- 1.4 The Method Statement must be read in conjunction with the Tree Survey Plan 0154-12

2. General Protection to existing trees and hedges

- 2.1 To avoid the tree roots being damaged during construction, the recommendations in BS 5837:2012 Trees in relation to design, demolition and construction – recommendations must be complied with at all times. Prior to the works commencing, protection measures will be put in place and maintained for the duration of the construction works.
- 2.2 Protective fencing in the way of Heris fencing will be erected around the trees in line with the British Standard 5837:2012 and will be erected as per the calculated distance shown on the attached Tree Survey Plan 0154-12
- 2.3 The protected area will remain out of bounds until the fencing is removed at the end of the development period. All protective fencing to clearly signed “Keep Out Restricted Area”
- 2.4 Particular care should be taken when working around the Tree Protected Area to avoid unnecessary damage to any roots. But where roots larger than 15cm are found they should be cut cleanly. Exposed roots shall be covered at the end of the working day.
- 2.5 No wires nails or other materials may be attached to protected trees.
- 2.6 No diesel oil, bitumen, cement or other material potentially injurious to the trees will be stacked or discharged where it could leach into the rooting zones.
- 2.7 No equipment, vehicles shall be operated, stored or parked within the root protection zone. No clean out areas will be constructed so that the material will be in or migrate to the root protection zone.
- 2.8 Roots or branches in conflict with construction work will be cut cleanly according to proper pruning methods. Any such work will be carried out in accordance with B.S.3998:2010 “Recommendations for Tree Work”

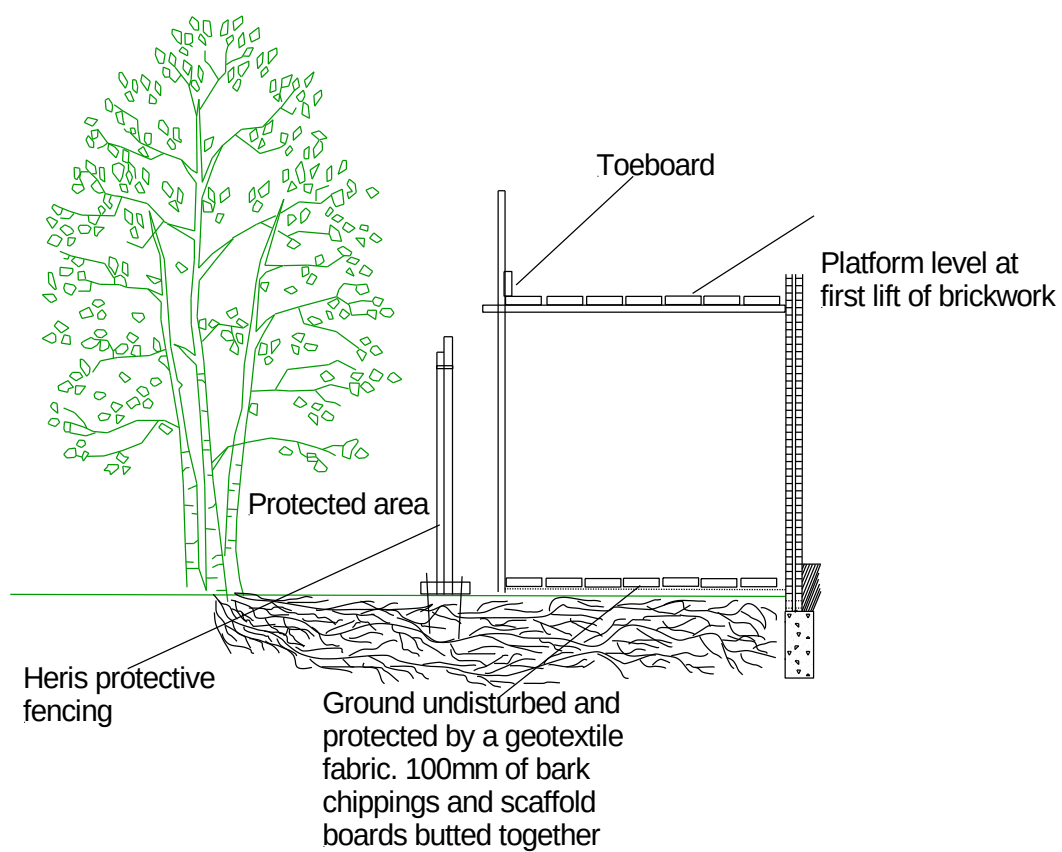
- 2.9 Levels around the existing trees and hedges will not be raised or reduced unless in compliance with the specification for trenching works and within line of British Standard 5837:2012.
- 2.10 Scaffolding may only be erected within protected areas if it is done in accordance with British Standard 5837:2012 and with the consent of the Tree officer of the Local Council.

3.0 Method Statement for 42 Church Road

- 3.1 Prior to the commencement of any works on site a meeting will be held with the building supervisor, the project arboriculturist appointed by the developer and the Tree Officer for Havant Borough Council to discuss all the details of the tree protection measures as specified and any other site operations that have implications for trees. It is the responsibility of the site foreman to inform all employees, contractors and sub-contractors visiting and or working on the site of the details specified and to raise the importance of the tree protection measures so as to avoid causing damage to retained trees.
- 3.2 Prior to the commencement of any building associated works i.e. the bringing onto site of equipment and materials etc protective fencing in the way of Heris fencing will be erected around the trees and hedges in line with the British Standard 5837:2012 and will be erected as per the calculated distance shown on the Tree Survey Plan 0154-12
- 3.4 Following approval of the tree protection measures the site team can commence with the development related activities.
- 3.5 On the northern corner of Plot1 where during building works require the erection of scaffolding within the RPA the following measures will be taken. In the first instance a geotextile membrane will be laid and covered to a depth of 100mm of bark chippings and on top of this will be placed scaffold boards or plywood sheets this will be necessary to avoid compaction in this area and protect the roots from the scaffolding. All work in this area will be carried out by hand and there should be no encroachment into the RPA by any machines. See diagram 1 Appendix 2 of this report.
- 3.6 On agreement with the Tree Officer of Havant Borough Council and in conjunction with the appointed project arborist the three areas as shown on the plan where block paving is to be used and which are in the RPAs the barriers will be moved back to allow the laying of a no-dig cellular confinement system i.e. GeoWeb overlaid with block pavers. In the carrying out of the laying of these block pavers and GeoWeb all work will be carried out by hand with no machinery entering the RPA.
- 3.7 The Tree Protection Barriers and Ground Protection shall not be removed, breached or altered without prior written authorization from the local planning authority but shall remain in a functional condition throughout the entire development, until all development related machinery and materials have been removed from site. If such protection measures are damaged beyond effective functioning then works that may compromise the protection of trees shall cease until the protection can be repaired or replaced with a specification that shall provide a similar degree of protection. Any issues regarding tree protection should be agreed and implemented prior to commencement of development.
- 3.8 The tree protection measures shall not be dismantled until all construction related machinery and materials have been removed from site and not without authorization from the Havant Borough Councils Tree Officer. Once authorization has been given the protection measures can be removed by hand and transported off site. During which time, no machinery or vehicles shall enter the area previously protected. No excavations,

storage of materials, soil stripping, the raising or lowering of levels or the laying of hard surfacing without prior approval.

Appendix 2



Scaffolding within the RPA as shown in BS5837:2012