

Tree Survey, Arboricultural Impact
Assessment and Tree Method Statement

To British Standard B.S. 5837: 2012

“Trees in Relation to Design, Demolition and Construction –
Recommendations

For
13 Frogmore Lane
Waterlooville
Hampshire
PO8 9QN



Prepared by

N J Trowell

Date

30 October 2014

Table of Contents

Introduction	3
The Site	4
The Tree survey	4-6
Observations	7-8
Appraisal	8
Conclusions	8
Appendix 1 Method Statement	9-10

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 city's 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 Mr Smith of 13 Frogmore Lane, Waterlooville to carry out a Tree Survey; provide professional advice i.e. root protection areas in line with B.S. 5837:2012 and prepare a Tree Survey, Arboricultural Impact Assessment and Tree Method Statement for 13 Frogmore Lane, Waterlooville, PO8 9QN

3. Caveats

3.1 The information contained within this report and the tree survey plan (0288-14) are based on the proposed site layout plan drawn up by Steven Barlow Partnership and surrounding information copied from Ordnance Survey Promap and my own survey measurements taken on site and I have relied on the accuracy of these drawings to compile my report and survey plan.

3.2 The trees have been surveyed and this report has been written in accordance with BS 5837:2012 Trees in relation to design, demolition and construction – recommendations.

3.3 There are two trees to the front of the property and two trees to the rear which I consider being in close proximity to the proposed new extension and that have canopies or roots that might affect the proposed development area. For ease of identification I have numbered the trees on the Tree Survey Plan 0288-14 (T1-T4).

3.4. The Havant Borough Councils TPO register shows the proposed development area forms part of a Protected Woodland Area and therefore any work to trees within the site needs the agreement of Havant Borough Councils Tree Officer prior to any tree related work being carried out.

3.5 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.

4. Survey Date

4.1 The trees were surveyed in accordance with BS5837:2012 on Thursday 30 October 2014 the weather overcast with a slight breeze.

5. The Site.

5.1 13 Frogmore Lane, Waterlooville is a three bedroomed detached house standing in its own grounds. The area is a Protected Woodland Area placed there by Havant Borough Council. It is accessed by two driveways off of Frogmore Lane. Within the front garden are two trees one being close to the front east boundary (T2) the other an ornamental Cherry (T1) standing in the middle of the front garden which has been badly pruned in the past. The rear garden is laid mainly to grass and then slopes down into a disused quarry which is a heavily wooded area of mainly Ash, Hazel and Yew. The Hazel looks in the past to have been coppiced. This area of woodland has in the past been badly neglected and is now in need of some maintenance work to help it to regenerate. There has been a large amount of fly tipping from the houses around the edge of the old quarry. This wooded area does not form part of this report except for two trees a multi stemmed Ash and a small Sycamore which are on the edge of this wooded area and closest to the proposed new extension to the house and will therefore need protection during building works.

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
Woodland Protected Area	T1	Ornamental Cherry	Prunus	1	Middle of front garden.
As above	T2	Sycamore	Acer pseudoplatanus	1	Eastern boundary front garden 13 Frogmore
As above	T3	Ash	Fraxinus excelsior	1	Rear garden close to northern boundary edge of wooded area
As above	T4	Sycamore	Acer pseudoplatanus	1	Rear garden on edge of wooded area.

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 (mm)	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	Cherry	#5m	250	N 3 E 2 W 2 S 2	#3 N	3.00	28	M	Poor physiological condition Poor structural condition Badly pruned	Request removal	<10	U
T2	Sycamore	#9m	500	N 4 E 4 W 4 S 5	#3 E	6.00	113	EM	Fair physiological condition Fair structural condition		20+	B
T3	Ash	#12m	400 400 400 400 300	N 4 E 5 W 5 S 5	#4 W	15.00	707	M	Fair physiological condition Fair structural condition		20+	B
T4	Sycamore	#5m	150	N 2 E 2 W 2 S 2	#2 N	1.80	10	Y	Fair physiological condition Fair structural condition		20+	B

Method used to calculate T3 as per BS 5837-2012. "For trees with more than five stems the combined stem diameter should be calculated as follows: (mean stem diameter) 2 X number of stems."

The calculated RPA for each tree should be capped to 707m²

13. Observations

13.1 T1 the ornamental Cherry in the front of the property is in poor condition due to having had to be cut back because of vehicles using the driveway. The tree is growing close to the drain pipe taking waste water away from the house and I was informed that this has blocked on a number of occasions and it appears when rodding the pipe that the roots of the Cherry have entered the pipe thus causing an obstruction. The tree is to be removed as part of this proposed development, however there is scope in the front garden to plant another tree more suitable for the space available.



T1

13.2 T2 is a large Sycamore in the front garden close to the boundary wall and pavement. The scheme has been designed that the proposed new layout for the driveway is outside of its RPA and therefore the tree will not suffer from further root compaction as shown on the Tree Survey Plan 0288-14.



T2

13.3 T3 is a large multi stemmed Ash growing in the rear garden and the closest tree to the proposed extension to the property. It has five stems growing from the base and I have calculated the RPA as per BS 5837-2012 and capped the RPA at 707m².



T3

- 13.4 There is scope within this proposed development to carry out further tree and shrub planting within the garden area.

14. Appraisal

- 14.1 The proposed new extension to the property has been designed to ensure that there is no encroachment into the Root Protection Areas of the trees on site. By the use of protective fencing and good working practices in line with BS 5837:2012 the proposed development will have no adverse effect on the future health and longevity of the trees.

15. Conclusions

- 15.1 It is concluded that it is practical and economically possible to construct the proposed new extension to the property without detriment to the existing trees as shown on the Tree Survey Plan 0288-14. 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 and I have indicated areas to be fenced on the attached Tree Survey Plan 0288-14.
- 15.3 For any 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

**Method Statement for protection of
Trees in line with BS5837-12**

**For
13 Frogmore Lane
Waterlooville
Hampshire
PO8 9QN**

1. Introduction

- 1.1 This Method Statement has been prepared by Nigel Trowell on behalf of Mr Smith and should be read in conjunction with the submitted Arboricultural Survey Plan 0288-14
- 1.2 The Method Statement recommends that the planned extension to this property on this site is carried out in accordance with BS5837:2012 Trees in relation to design, demolition and construction – recommendations
- 1.3 The building contractor must agree to undertake tree protection to the standard advised in this Method Statement and to the satisfaction of Havant Borough Councils Tree Officer.

2. General Protection to existing trees

- 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 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 Heras fencing will be erected around the trees in line with the British Standard 5837:2012 and will be erected as per the distance shown on the attached Tree Survey Plan 0288-14
- 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 areas to avoid unnecessary damage to any roots. Roots smaller than 25mm diameter may be pruned back making a clean cut with a suitable sharp tool i.e. secateurs or hand saw. Where roots occurring in clumps or of 25mm diameter and over are found they should only be cut following consultation with an arborist. No roots should be left exposed but covered with either wet sacking or recovered with soil to prevent roots drying out.
- 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 correct 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.

3.0 Method Statement Site Specific for 13 Frogmore Lane, Waterloo, PO8 9QN

- 3.1 Prior to the commencement of any works written approval must have been received that works can go ahead in line with this Method Statement from the Tree Officer for Havant Borough Council as part of an agreed planning application. It will be the responsibility of the site manager 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 With the agreement of Havant Borough Councils Tree Officer the protective fencing in the way of Heras fencing will be erected around the trees in line with the British Standard 5837:2012 –Trees in relation to design, demolition and construction-recommendations and will be erected as per the distance shown on the attached plan 0288-14. Prior to erection of the fencing all materials currently being stored at the base of T2 will be removed and no further storage of materials will take place within its RPA.
- 3.3 Following approval of the tree protection measures the site team can commence with the development related activities. And at this time T1 the ornamental Cherry will be removed.
- 3.4 The Tree Protection Barriers 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.
- 3.5 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 authorisation 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.

Nigel Trowell

30 October 2014