

Tree Survey
and
Arboricultural Impact Assessment
in accordance with BS 5837 : 2012
'Trees in relation to design, demolition and construction'

Trees at
South Yard.
Wicks Farm, Ford
BN18 0DF

Prepared for
Mr K. Langmead
August 2019

ARBORTECH (Consultancy)

The Arbor Centre, Osiers Farm, Clay Lane, West Ashling,
Chichester, West Sussex. PO18 8DJ.



Informative : Retained Trees & Development Sites.

TREES NEED ROOTS FOR :

- Anchorage i.e Stability.
- Water and nutrient uptake i.e general health.
- Energy storage i.e for drought periods.
- Breathing i.e Vertical gaseous exchange

DAMAGING TREE ROOTS MAY :

- Kill the tree.
- Weaken the tree.
- May cause the tree to fail.

TREE ROOTS CAN BE DAMAGED BY :

(Any may deny their needs for survival)

- Root severance
- Soil compaction.
- Escape of toxic fluids i.e Oil, Bitumen.
- Impermeable surfaces i.e Concrete



Tree Survey.

A Tree Survey records information about the trees on (or adjacent) a site, independently of any design proposal. Trees, groups of trees and woodlands are assessed for their physiological and structural condition and preliminary Health & Safety works are recommended. In addition the trees are categorised for their quality and value within the existing context. The tree categories are then differentiated on a tree survey plan.

The results of the Tree Survey may be included in the preparation of a Tree Constraints Plan which should be used to assist with layout design.



Arboricultural Impact Assessment.

Further to a tree survey, consideration is given to how a proposed development and retained trees will co-exist and interact in the present and future. It can identify and remove any potential conflicts between trees and the requirements of the development.

An AIA aims to identify, evaluate and mitigate the direct and indirect impacts on retained trees, that may arise as a result of the implementation of the layout proposal.



Arboricultural Method Statement for Protection of Trees during Construction.

This is a statement which is used to describe how construction works can be carried out close to trees and how the above and below ground parts of the trees will be adequately protected during this process.

Works are carried out in accordance with British Standard 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* and good arboricultural practice.

1. INTRODUCTION

Client : Mr K. Langmead.

Report Ref : Lang/ATSurv/13819

Site : South Yard. Wicks Farm, Ford

The Development Proposal.

- 1.1 The proposal consists of the construction of a single span warehouse of 450sqm.

Documents provided :

- 1.2 John Hall Consulting Ltd provided the following drawings :
- Topographical Survey indicating the proposed site layout.
Drawing No : PL01 Rev A. Dated January 2019 by Medlams Surveys Ltd.
 - Warehouse elevations drawing. Drawing No : E10326-GA-001. Dated 4th February 2019 by Cambridge Hok.

Relevant background information :

The planning consent for the warehouse (Reference F/5/19/PL) is subject to condition 3 which relates to trees;

'In order to ensure that no detrimental harm occurs to the neighbouring trees to the eastern boundary which are of value, no development shall commence until an Arboricultural Method Statement (AMS) and Tree Protection Plan have been submitted to and agreed in writing by the Local Planning Authority. The Arboricultural Method Statement (AMS) and Tree Protection Plan shall be carried out as agreed by the Local Planning Authority in perpetuity.

Reason: To ensure the retention and maintenance of trees and vegetation which is an important feature of the area in accordance with policy D DM1 and ENV DM4 of the Arun Local Plan.

Scope of the report.

- The report is based on the site visit, and the information provided.
- This report includes a preliminary Visual Tree Assessment (VTA) from ground level.
- No detailed investigations have been undertaken.
- All dimensions are estimated.
- This report should be read in conjunction with the relevant scaled drawings.

- 1.3 **Limitations of use and copyright** : As set out in the terms of engagement provided.

- 1.4 **About Us:** Details provided in Appendix 4.

2. TREE SURVEY

2.1 **Identification and location of the trees :**

The trees can be identified on the plan included at Appendix 2.

2.2 **Tree observations :**

The trees were visually inspected from ground level and the information recorded on the '*Tree Survey Schedule*' included at Appendix 1.

2.3 The '*Tree Survey Schedule*' should be read in conjunction with Appendix 3 '*Tree Survey Note*

3. ARBORICULTURAL IMPACT ASSESSMENT.

During the site visit a tree survey was undertaken which included a line of 3 Poplar trees (T1 – T3) located closest to the east of the permitted warehouse. Although there were further trees located to the East of this line their distance from the warehouse site determined that they were not relevant to this evaluation.

The Root Protection Area dimensions were calculated for trees T1 – T3 in accordance with BS5837 : 2012 Table D1 (The RPA dimensions for the individual trees are listed in the tree survey schedule at Appendix 1 of this report). The Root Protection Areas were then measured on the ground to ascertain their extent (m) in relation to the permitted warehouse.

The resulting layout (as illustrated at Appendix 2) concludes that no detriment or harm will occur to the neighbouring trees due to the implementation of this development.

This is due to the fact that;

- a) The RPAs do not extend to the development site.
- b) There is a substantial embankment (large physical barrier) approximately 1.5m in height and 4-5m in width bounding the site which prevents access into the RPAs to the East. Our client wishes to retain this bank as it provides screening, privacy and security to the whole site, indeed this was the intent when it was formed.

A hedge of native mix was planted on the embankment approximately 15 years ago. The Root Protection Area of the hedge is contained well within the upper confines of the embankment.

6. OTHER CONSIDERATIONS

Trees subject to statutory controls :

- 6.1 Consultation with the local planning authority will be required prior to any pruning works to trees covered by a tree preservation order or located in a conservation area.

Risk

- 6.2 The Occupiers Liability Act 1957 & 1984 places a “common duty of care” upon the owner occupier of a site to take reasonable steps to minimise the risk of personal injury or damage to property arising from any tree on that site.

Trees outside the property.

- 6.3 Trees located in adjacent properties are effectively out of the control of the owners of this site. By common law, branches from trees on adjacent properties extending over boundaries can be pruned back to the boundary line without the permission of the owners. However, the material belongs to the tree owner and the same guidance on statutory controls apply.

Wildlife.

- 6.4 Your attention is drawn to the wildlife and Countryside Act 1981 and related legislation which provides statutory protection for nesting birds and bats including roosting sites, some mammals, invertebrate species and plants.

7 BIBLIOGRAPHY / REFERENCES

British Standard 5837 '*Trees in relation to design, demolition and construction - Recommendations*': 2012.

British Standard 3998 '*Recommendations for Tree Work*' (2017)

Cellweb™. <http://www.geosyn.co.uk/product/cellweb-tree-root-protection>

Conservation of Habitats and Species Regulations (2010).

Occupiers Liability Act 1957 & 1984.

Town & Country Planning Act 1990.

Wildlife & Countryside Act 1981 (As amended)

CRoW Act 2000

APPENDIX 1
Tree Survey Schedule

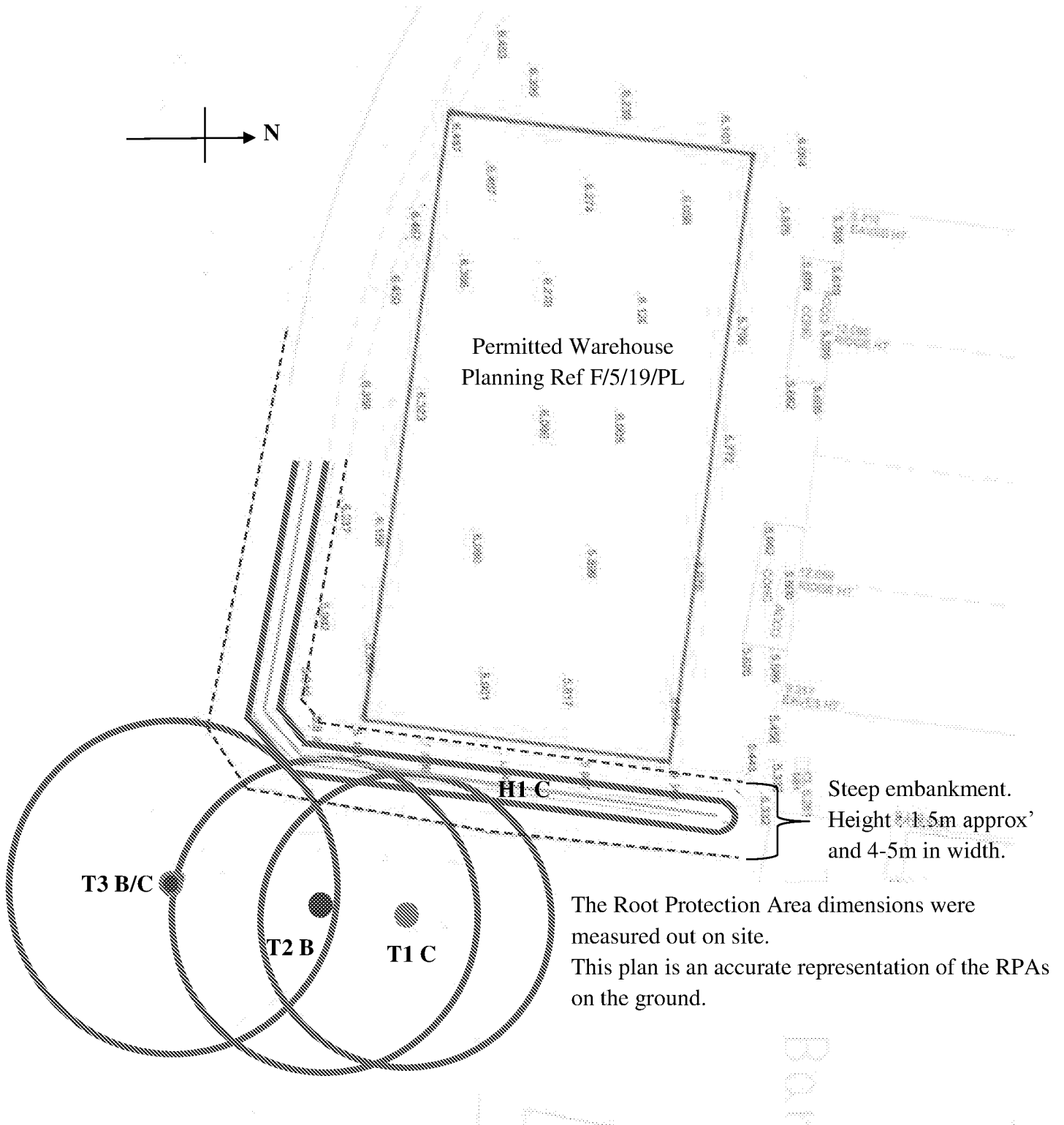
Tree No	Species	Height (m)	Stem Diameter (mm) BS5837 as Annex C	Branch spread	Height above ground(m)		Age Class	Structural	Physiological	Category	RPA radius in metres
					1 st branch	Canopy					
T1	Poplar (located on neighbouring property)	26	580	N 9 S 1 E 1 W 7	8 West	10	Mature	Fair	Good	C	7
Notes : Extensive Ivy from base into mid crown. Single upright stem with heavy crown bias to North West from a height of 8m. Main stem bifurcates at 8m – union obscured by Ivy.											
T2	Poplar (located on neighbouring property)	27	620	N 4.5 S 3 E 2 W 8	8 West	9	Mature	Fair	Good	B	7.4
Notes : Extensive Ivy from base into lower crown. Single upright stem with crown bias to west from a height of 8m. Main stem bifurcates at 8-9m.											
T3	Poplar (located on neighbouring property)	27	650	N 6 S 2 E 4.5 W 8	7 West	7	Mature	Fair	Good	B/C	7.8
Notes : Extensive Ivy from base into lower crown. Single upright stem which bifurcates at 7m and stem to East further trifurcates at 11m.											
H1	Native mix hedge	3	.75 max'	-		0	SM	Good	Good	C	.9 max'
Notes : Extensive Ivy from base into lower crown. Single upright stem which bifurcates at 7m and stem to East further trifurcates at 11m.											

APPENDIX 2

Tree Location Plan

indicating Root Protection Areas in relation to permitted development.

Plan not to scale – For illustrative purposes only



Green continuous circle indicates Root Protection Area of trees to be retained.

All trees are to be retained.

APPENDIX 3

Tree Survey Notes

GENERAL TREE SURVEY NOTES.

- Tree species has been determined (common name and scientific)
- All tree dimensions are estimated, height and spread being measured in metres and trunk diameter measured at 1.5m above ground level or if more than one stem, an average stem diameter is stated.
- The tree age classification is made in terms of the trees site specific maturity within the landscape.

Age groups are indicated as

J	- Juvenile tree
SM	- Semi-mature tree
EM	- Early mature
M	- Mature tree
OM	- Over mature
Vet	- Veteran
Anc	- Ancient

ASSESSMENT AND CATEGORY CLASSIFICATION.

The condition of trees included in the survey has been assessed by a person being qualified and experienced in arboriculture. In making the assessment particular consideration has been given to :

- Tree species.
- Tree dimensions.
- Health, Age and Vigour of tree.
- Tree conformation including any structural defects.
- The location of the tree, relative to the existing site and surroundings.
- The landscape and environmental/habitat value.

On the basis of this individual assessment, the trees are classified into one of the following categories, or intermediate categories

- | | | |
|---|---------|--|
| A | (GREEN) | Trees of high quality. |
| B | (BLUE) | Trees of moderate quality. |
| C | (GREY) | Trees of low quality in adequate condition until new planting established. |
| U | (RED) | Trees in current context cannot realistically be retained. |

In addition, the above categories may be attributed one or more of the following criteria :

- 1 Arboricultural values.
- 2 Landscape values.
- 3 Cultural values including Conservation.

APPENDIX 4 – ABOUT US....

We specialise in all tree-related matters :

- ✓ Development/Planning-BS5837:2012,
- ✓ Planning Services-Tree Preservation Orders & Conservation Areas,
- ✓ Tree Hazard Evaluation,
- ✓ Woodland Management etc

We have 25 years experience in the arboricultural industry.

We aim to keep at the forefront of arboriculture; through ongoing review, training and development programmes.

Arboricultural Consultant : Mr J.R Hayes. Tech.Cert.(Arbor.A).
Technicians Certificate in Arboriculture 1998.
City & Guilds Tree Surgery for Craftsmen 1990.

Arboricultural Surveyor : Mrs J.A Hayes.
Lantra Professional Tree Inspection Award 2006
Registered Natural England Class Survey Licence Holder :
Bat Survey Science & Education Level 2 : CLS02485

Member of :

The Arboricultural Association.
Chartered Institute of Ecology and Environmental Management.

Arboricultural Consultants to :

Chichester Cathedral.
Chichester City Council
Chichester District Council
Goodwood Estate.
Halburn Ecological Consultants.
London Biggin Hill Airport.
Mansell Construction.
John Mowlem & Company PLC.....
References supplied upon request.

Insurance cover :

Employers liability	10,000,000
Public liability	5,000,000
Professional indemnity	1,000,000

Copy supplied upon request

TERMS OF ENGAGEMENT.

1. Any report is provided for the sole use of the named Client and is confidential to the Client and his professional advisors. The Consultant accepts responsibility to the Client alone for the stated purposes of the report. No responsibility whatsoever is accepted to any person other than the Client himself. Any other such person relies upon the report at entirely his own risk. Neither the whole nor any part of the report or any reference thereto may be reproduced or transmitted, in any form or by any means, nor sold, hired or divulged to any third party without the Consultants prior written approval.
2. The content of any information supplied to the consultant by the client, including such items as reports, plans diagrams letters, data etc will be deemed to be true and accurate and such items will not be investigated or checked for their validity. Any information supplied subsequently found to be inaccurate, misleading or false may render the contents of the report invalid.
3. The report remains the property of the Consultant until payment has been received in full. The Client shall pay the Consultant his fee regardless of any outcome. In addition the Client will reimburse the Consultant the cost of all reasonable out of pocket expenses which he may incur. Payment in full of the total amount due must be made within 14 days and the Consultant shall be entitled to charge interest both before and after any judgement on the amount unpaid, at the rates listed below (delayed payment surcharge) per month (30 days) from time to time, until payment in full is made (a part of a month being treated as a full month for the purpose of calculating interest). No discount nor retention or set off against the same due is allowed unless agreed previously by the Consultant in writing.
DELAYED PAYMENT SURCHARGE.
Accounts not settled within the 14 day period will be surcharged as follows :
2.5% for payment within 1 month.
5% for payment within 2 months.
10% for payment within 3 months (maximum time limit)
Surcharges are not an offer of extended credit.
4. The consultant reserves the right to charge the client for a proportion of the services undertaken, should the client, further to instructions, cancel the agreed commissioned services.
5. Any information in relation to the tree(s) survey/inspection must be provided at the time of the survey/inspection process, prior to the compilation of the report document. Any information received by the consultant after this time will not have been considered and an additional re-assessment of the trees may be necessary at the clients expense.
6. In making the report, the following assumptions will be made by the Consultant (and these are therefore matters for which no responsibility can be accepted by the Consultant);
 - (i) that there are not underground pipes, wires, cables, or other services or installations which might be damaged as a result of work recommended or necessary.
 - (ii) that no tree(s) is the subject of or protected by a Tree Preservation Order or the terms of a planning consent (unless stated), in relation to which the Client must make his own enquiries of the Planning Department responsible.
7. It is possible that the report will suggest further investigation works to be carried out by a specialist firm or person eg. Structural Engineer, Surveyor, drain or electrical engineer or other. On no account will liability be accepted by the Consultant in respect of matters on which the client is recommended to obtain such other specialist advice or if the Client proceeds or acts without obtaining and acting upon the relevant further advice.
8. The report will not purport to express an opinion about or to advise upon the condition of un-inspected parts of the land or tree(s) and should not be taken as making any implied representation or statements about such parts.
9. Preliminary surveys are visual inspections which do not include any information on engineering, no root or soil samples are taken for analysis and trees are not climbed (unless stated).
10. The Consultant will inspect as much of the land and tree(s) as is practicable given the scope of his instructions and the level of fee agreed. He will be under no obligation to inspect those areas that are unexposed or not readily accessible.
11. The tree survey and inspection process requires good, clear access to the trees being inspected. Any obstructions will limit the inspection process and will be noted within the survey / inspection assessment. The removal of any obstructions such as dense undergrowth, climbing plants etc will not be undertaken as part of the process, unless this additional operation has been previously agreed with the client.
12. The statements made in this report do not take account of the effects of extreme climate, vandalism or accident whether physical, chemical or fire. We cannot therefore accept any liability in connection with these factors, nor where prescribed work is not carried out in a correct or professional manner in accordance with current good practice. The authority of this report ceases at any stated time limit within it, or if none stated after 1 year from the date of the survey or when any site conditions change, or pruning or other works unspecified in the report are carried out to, or affecting the subject tree(s), whichever is the sooner.
13. Any trees referred to in this report should be re-inspected further to storms or extreme weather conditions due to the potential for deterioration in tree condition/situation.
14. All trees referred to in this report are assessed in the situation and site usage as seen on the day of inspection.
The client should inform the consultant of any foreseeable changes/variations prior to the site visit.
15. Any verbal information given by the Consultant prior to the Clients receipt of the written report shall not be construed as a representation or warranty and should not be relied or acted upon.
16. Any claim by the Client which is based on any defect in the nature or quality of the Consultants services shall be notified to the Consultant within 7 days from the date of supply.
17. Except in respect of death or personal injury caused by the Consultants negligence, the Consultant shall not be liable to the Client by reason of any representation, or implied warranty, condition or other term, or any duty at common law, or under the express terms of any contract, for any consequential loss or damage (whether for loss of profit or otherwise), costs, expenses or other claims for consequential compensation whatsoever (and whether caused by the negligence of the Consultant his employees or agents or otherwise) which arise out of or in connection with the Consultant's services, except as expressly provided in these conditions.
18. The Consultant shall not be liable to the Client or be deemed to be in breach of the contract by reason of any delay in performing, or any failure to perform any of the Consultants obligations in relation to the services he renders.
19. The identification of fungi, insects or tree disorders are based on field observations and do not include a laboratory analysis (unless requested).
20. The contract between the Client and the Consultant shall be governed by the laws of England.