

ARBORICULTURAL SURVEY

Georgina Tearne MSc HND (Arboriculture) F.Arbor.A.
20th September 2012

SITE ADDRESS

Hill Croft
Cawthorne Lane
Darton
Barnsley
S75 5EF

PREPARED FOR:

Chris Eyres Designs

Table of Contents

1 BACKGROUND

- 1.1 Brief Page 1
- 1.2 Documents Provided Page 1
- 1.3 Tree Status Page 1

2 SURVEY DETAILS

- 2.1 Site Visit Page 2
- 2.2 Inspection Methods Page 2

3 SITE OVERVIEW

- 3.1 Site Description Page 3
- 3.2 Tree Population Page 3

4 TREE CONSTRAINTS

- 4.1 Root Protection Areas Page 4
- 4.2 Tree Canopies Page 5

5 IMPACT ASSESSMENT

- 5.1 Site Proposals Page 6
- 5.2 Statutory Tree Protection Page 6
- 5.3 Tree Appraisal Page 6
- 5.4 Services and other Considerations Page 7

6 CONCLUSIONS

Page 8

7 GENERAL GUIDELINES, TERMS & CONDITIONS

Page 9

APPENDICES

Appendix 1 – Survey Methodology

Appendix 2 – Tree Survey Data

Appendix 3 - Tree Work Schedule

1 BACKGROUND

1.1 Brief

This arboricultural report has been commissioned on behalf of the ultimate client by Mr. Chris Eyres of;

**Chris Eyres Designs
Viceroy House
13 Southbrook Terrace
Bradford
BD7 1AD**

It is required as part of a planning application for alterations and extensions to:

**Hill Croft
Cawthorne Lane
Darton
Barnsley
S75 5EF**

1.2 Documents provided

To assist in the production of this report I have been provided with a copy of the proposed site layout overlaying the existing site layout although the positions of the existing trees were not included.

1.3 Tree Status

A check was made with Barnsley Metropolitan Borough Council on 20th September 2012 by telephone. I spoke to Ed Jowett, Tree Officer, who confirmed that there are no Tree Preservation Orders within this area. Details of the Local Planning Authority are:

**Barnsley Metropolitan Borough Council
Tel: 01226 770770**

2 SURVEY DETAILS

2.1 Site Visit

2.1.1 Surveyor

Georgina Tearne MSc, HND (Arboriculture) F.Arbor.A.

2.1.2 Date of Survey

18th September 2012

2.1.3 Other Persons Present

Mr. Bennett – current owner of Hill Croft

Owner of adjacent property (and Weeping Ash)

2.1.4 Weather Conditions

It was fine although with an approximate temperature of 18 degrees.

2.2 Inspection Methods

A visual tree inspection was carried out from ground level of a number of individual trees and groups of vegetation all directly adjacent to the site.

Data collection of the trees surveyed has been carried out to BS5837:2012 and full details of the methods used are provided in Appendix 1.

An overview of the items is presented in the following section while notes in the form of a schedule are presented in a spreadsheet at Appendix 2. The location of the trees and groups are identified on the accompanying plan Ref: 120918 TCP & 120918 TPP.

The positions of the trees in the adjacent property were not shown on the provided survey drawings and therefore they were measured on site. As such the drawings accompanying this report should not be assumed to be accurate and all measurements should be checked on site.

3 SITE OVERVIEW

3.1 Site Description

- 3.1.1 The site is a private residential property consisting of a detached bungalow with a separate garage and an outdoor swimming pool. It is set within its own grounds which are gated onto Cawthorne Lane.
- 3.1.2 The site slopes from the northern boundary with retaining walls cutting across the grounds.

3.2 Tree Population

- 3.2.1 The tree population within this survey is limited to those within the neighbouring properties to the north and east of the site. Most noticeable is the Weeping Ash to the north of the site adjacent to Cawthorne Lane. This tree is considered to have a moderate amenity value due to its position along Cawthorne Lane and its grouping with other surrounding trees. The tree population surveyed consists of this mature Weeping Ash, a standard Ash and a row of Hawthorn.
- 3.2.2 Trees within close proximity of the proposed changes to the retaining wall across the top of the site have been included. Of these, 2 trees have been categorised as 'B' while the remaining group and hedge have been categorised as 'C' in accordance with BS5837:2012. The trees and vegetation identified as 'C' have been categorised as such due to their limited amenity and/or long-term value and the ease at which they can be replaced.
- 3.2.3 Due to the position and maturity of the main tree the tree population is considered to have a moderate amenity value although it should be appreciated that some trees and groups have much lower values when considered individually rather than as part of the group as a whole.

4 TREE CONSTRAINTS

4.1 Root Protection Areas

4.1.1 The accompanying drawings (Ref: 120918TCP & 120918TPP) show the positions, canopy spreads and root protection areas (RPAs) of the trees included within the survey. The RPAs are calculated from the tree stem diameters following the guidance of BS5837:2012. Although the RPA attempts to identify an area of the tree's root system which should be protected the simplistic circle (or square) does not take account of constraints such as buildings, land form and walls etc. which may have restricted or influenced root development. In this particular instance, the RPA for the weeping Ash has been adjusted to take account of the retaining walls both within the site and along Cawthorne Lane. In the other cases the circular RPAs indicated are considered to provide a reasonable guide to the extent of the rooting areas which should ideally be protected. The RPAs shown for groups are indicative only and are based on stem diameters and tree positions where possible. In the case of the hedge the extent of the canopy spread has been considered to be a suitable guide for the RPA requirements.

4.1.2 Following the guidance of BS5837:2012 proposals for the site should aim to incorporate those trees which are identified as 'A' and 'B'. In this instance this applies to 2 'B' category tree. 'C' category trees can usually be retained at least in the short term although it is generally accepted that they should not influence the proposed layout and it may be considered more appropriate to remove many of them in favour of a new landscaping scheme. However, the trees within this survey are all located within neighbouring properties and therefore must all be retained.

4.1.3 When considering the layout of the site and the retention of significant trees proposals should generally be kept outside of both the RPA and the canopy spread. However, it may be possible to encroach into these areas where the encroachment is limited to less than 20% of the total RPA and the remaining RPA is

unaffected by any other aspects of the development. In these cases consideration must be given to the type of construction methods to be employed and the risk they may pose to the trees.

4.2 Tree Canopies

- 4.2.1 Four-point canopy spreads for each tree are indicated on the accompanying drawings. Generally the canopy spread of a tree constitutes a constraint in terms of its physical presence and its shading potential. Consideration will be given to both the current and potential canopy spreads in relation to the proposals for the site in the following impact assessment.

5 IMPACT ASSESSMENT

5.1 Site Proposals

- 5.1.1 Proposals for the site include the creation of an extension to the back of the main bungalow and increased vehicle access into the site and a new access point from Cawthorne Lane.

5.2 Statutory Tree Protection

- 5.2.1 The trees are believed not to be protected by any legislation although it is recommended that this is double checked before any works are carried out. However, work identified within a planning approval will over-ride any legislative protection.

5.3 Tree Appraisal

- 5.3.1 In order to accommodate the proposed development it will not be necessary to remove any of the trees surveyed. However, there is concern regarding the proximity of the neighbouring Weeping Ash tree in relation to the proposed re-positioning of the retaining wall to the north of the main building.
- 5.3.2 This Ash is located on an elevated position in the garden of the neighbouring property. It is a mature specimen and although valuable to the local amenity and to its owner it is beginning to show signs of decline. On its main stem there is a large wound, due to the removal of a large limb in the past, which is now showing signs of significant decay. As this decay continues the structural stability of its stem will undoubtedly be compromised. It is therefore recommended that it is assessed regularly so that it doesn't become a liability in the future.
- 5.3.3 Due to the position of this tree its root system will not have developed equally in all directions. It will have been limited by the presence of the retaining walls to the road edge and the wall in the site. The shape of the RPA, although retaining the area required, has therefore been adjusted to give a more accurate picture of the main rooting area.

- 5.3.4 In order to accommodate the proposed new position of the retaining wall it will be necessary to encroach into this identified RPA. However, the level of encroachment is slight and is unlikely to result in any significant impact on the viability of the tree in the long-term. It is felt that the degree of encroachment, if carried out carefully and under supervision, should be acceptable. However, as a precautionary measure it is suggested that an exploratory trench is hand-dug along the proposed line of the retaining wall to establish that there are no structural roots present. This should be supervised by an arboricultural consultant who can advise if any roots are found.
- 5.3.5 In relation to the other trees identified within the survey there are no concerns in relation to the proposals if the protective barriers are installed as shown.
- 5.3.6 Consideration has been given to the canopy spreads of the trees to be retained in relation to the proposals and there are no areas of significant concern.
- 5.3.7 During construction of the proposals there is the potential for damage to other trees, particularly beyond the site and therefore protective barriers should be installed. The 'Tree Protection Plan' which accompanies this report (Ref: 120918TPP) shows the proposed position of such protective barriers which should be retained during the development phase.

5.4 Services and Other Considerations

- 5.4.1 It is assumed that all services and excavations will be within the site and will not extend into any areas protected by barriers or within the RPAs of trees to be retained. Further advised can be provided in this respect should it be required.

6 CONCLUSIONS

- 6.1 The tree population surveyed is limited to those along the boundary in the neighbouring properties to the north and east. Collectively the trees have a moderate amenity value although individually those within G2 and H4 are considered to have a much lower amenity values.
- 6.2 The proposals for the site include the construction of an extension to the rear of the building and increased vehicle access into the site.
- 6.3 Although no trees need to be removed to accommodate the proposals it will be necessary to encroach into the RPA of the neighbouring Weeping Ash. However, with supervised excavation and care it is felt that this proposed retaining wall can be installed with little long-term damage to the tree.
- 6.4 In order to adequately protect the neighbouring trees during the development protective barriers as shown on the accompanying drawings should be installed and retained for the duration of the development.

7 GENERAL GUIDELINES, TERMS & CONDITIONS

- 7.1 All tree work should be carried out by qualified Arboricultural Contractors with at least £1 Million Public Liability Insurance cover.
- 7.2 Tree work must be carried out to BS3998 which specifies recommendations for tree work.
- 7.3 The acceptance of this report constitutes an agreement with the terms and guidelines listed within this report.
- 7.4 No liability can be accepted by the consultant in respect of the trees unless the recommendations within this report are carried out under his supervision. Nor shall the consultant be responsible for events which happen after the time of the survey due to factors which were not evident at the time.
- 7.5 Relationships between trees and other objects such as buildings are rarely static and can at times change quite unpredictably. It should therefore be understood that the inspection and monitoring of the condition of trees is a continuing requirement which, in this instance, is recommended on an annual basis.

I trust that this report provides all the necessary information although if further advice is needed please do not hesitate to contact me.

Signed

20/09/2012

**Georgina Tearne MSc. HND (Arboriculture) F.Arbor.A.
Arboricultural Consultant**

t/a Arbolution
Edge View
Blackshaw Head
Hebden Bridge
West Yorkshire
HX7 7JF

Tel/Fax: 01422 844636
Mobile: 07738 233216
Email: info@arbolution.co.uk

APPENDICES

APPENDIX 1 - SURVEY METHODOLOGY

A visual assessment of each tree was made from ground level in accordance with BS 5837:2012 Trees in relation to construction - Recommendations.

The following information has been collected for each tree and is presented in the spreadsheet at Appendix 1.

1. **Height** - measured in metres using a clinometer.
2. **Stem Diameter** - measured in millimetres generally at 1.5m above adjacent ground level. There are some variations to the measurements which are detailed in Annex C of the British Standard.
3. **Spread** - the measurement taken as a minimum at the four cardinal points, to derive an accurate representation of the crown.
4. **Crown Clearance** - measured from the highest point of the adjacent ground level in metres.
5. **Age Class** - described as young (Y), middle aged (MA), mature (M), over-mature (OM), veteran (V).
6. **Physiological Condition** - classed as good, fair, poor, or dead.
7. **Structural Condition** - details of any physical defects and the presence of any decay etc.
8. **Preliminary Management Recommendations** - detail of works required including details of further investigations recommended where suspected defects require more detailed assessment and where there is the potential for wildlife habitat.
9. **Estimated Remaining Contribution** - expressed in years as; less than 10, 10-20, 20-40 and more than 40.
10. **Category Grading** – trees are categorised, in accordance with the cascade chart for tree quality assessment, into one of the following categories;

Trees Unsuitable for Retention

Category U

Those in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management.

Trees to be Considered for Retention

Category A

Those of high quality and value: in such a condition as to be able to make a substantial contribution (a minimum of 40 years is suggested).

Category B

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

Category C

Those of low quality and value: currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested), or young trees with a stem diameter below 150 mm.

In addition there are three subcategories which should also be applied identifying the form taken by the value of each tree;

- 1** Mainly arboricultural values
- 2** Mainly landscape values
- 3** Mainly cultural values, including conservation