APPENDIX 3:
WORK SCHEDULE

No.	Species	Height (m)	Stem Diameter (mm)	Recommendations
T1	**Holly**	7	490	At present no action.
T2	**Rowan**	7	220 est.	At present no action.
T3	**Ash**	6	120, 120, 120	At present no action.
G4	**Hawthorn**	6	<250 est	No action.
T5	**Oak**	12	600 est	Remedial prune over site.
G6	**Holly, Sycamore**	<12	200 max est.	Cut back to the boundary line.
T7	**Alder**	15	750 est.	Remove deadwood over site.
T8	**Ash**	18	400 est.	No action.
G9	**Rowan & Hawthorn**	6	300, 300 max est.	Owner to fell or cut back to boundary.
T10	**Beech**	16	390	Remove the 1st 2 primary limbs to the northwest.
T11	**Alder**	11	600 est.	Owner to fell.
T12	**Alder**	10	300	At present no action.
T13	**Ash**	17	450 est.	Owner to remedially prune.
T14	**Sycamore**	16	550 est.	No action.
T15	**Alder**	12	480 est.	Fell.
G16	**Elder, Hawthorn, Holly, Sycamore, Beech, Rhododendron.**	<12	<200	At present no action.

151105 Appendix 2: Tree Schedule - Ashbourne Road, Leek

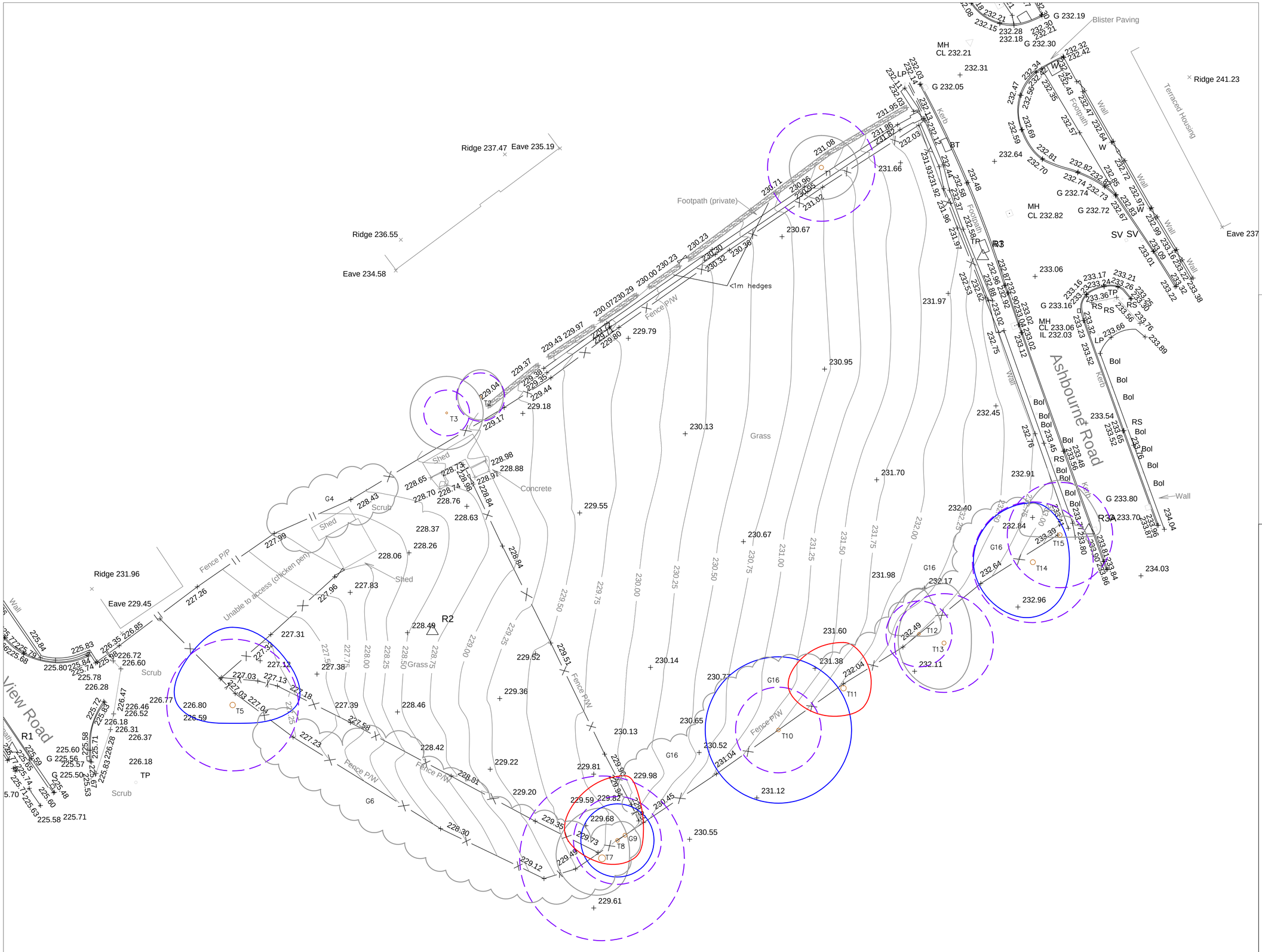
No.	Species	Latin Name	Height (m)	Stem Diameter (mm)	Spread (m)				Age Class	Height of Crown Clearance (m)	Physiological Condition	Structural Condition	Preliminary Management Recommendations	Estimated Remaining Contribution (years)	Category Grading
					N	S	E	W							
T1	**Holly**	*Ilex aquifolium*	7	490	3.5	3.5	4	3.5	M	1.5	Fair	Single stemmed with a large bole. Forked at 1.6m. Dense canopy above with vertical shoots from lowest limbs.	At present no action.	20-40	C1
T2	**Rowan**	*Sorbus aucuparia*	7	220 est.	3	2.5	2.5	2.5	MA	1	Fair	Located in the neighbouring property. Twin-stemmed crown with 2 stems rubbing together. Crossing branches in crown.	At present no action.	20-40	C1
T3	**Ash**	*Fraxinus excelsior*	6	120, 120, 120	4	4	4	4	Y	1	Fair	Off site in neighbouring property. Not fully surveyed. Dense shrubbery around base. Multi-stemmed from base. Limited individual value. No major visible defects.	At present no action.	40+	C1
G4	**Hawthorn**	*Crataegus monogyna*	6	<250 est	See Plan				M	0	Fair	Approximately 6 trees in a row forming a partial hedge. Dense ivy into canopies. In neighbouring property. No major visible defects.	At present no action.	20-40	C2
T5	**Oak**	*Quercus robur*	12	600 est	8.5	2	7	6	M	2	Fair	Off site. One sided form towards site on edge of woodland belt with lime, sycamore and ash behind. Some major deadwood and stubs.	Remedial prune over site.	40+	B1
G6	**Holly, Sycamore**	*Ilex aquifolium, Acer pseudoplatanus*	<12	200 max est.	See Plan				M	0	Fair	The trees are growing from beyond the 2nd fence but the canopies extend to the first. Dense and of reasonable shape and form. Some deadwood and young sycamore throughout the group. Large mature trees behind the group to 25m in height and up to 600mm diameter.	At present no action.	20-40	C2

151105 Appendix 2: Tree Schedule - Ashbourne Road, Leek

No.	Species	Latin Name	Height (m)	Stem Diameter (mm)	Spread (m)				Age Class	Height of Crown Clearance (m)	Physiological Condition	Structural Condition	Preliminary Management Recommendations	Estimated Remaining Contribution (years)	Category Grading
					N	S	E	W							
T7	**Alder**	*Alnus glutinosa*	15	750 est.	55	4	3	5	M	6+	Fair	Off site. Thick bole. Fully mature. Forked at 3m Deadwood and stubs.	Remove deadwood over site.	10-20	C1
T8	**Ash**	*Fraxinus excelsior*	18	400 est.	4	4	4	4	MA	6+	Good	Located off site. Single stemmed. Good shape and form. High crown. Not fully surveyed but no major visible defects.	No action.	40+	B1
G9	**Rowan & Hawthorn**	*Sorbus aucuparia, Crataegus monogyna*	6	300, 300 max est.	6.5	3	2	6.5	M	1	Poor	A very poor, multi-stemmed rowan with an almost dead Hawthorn adjacent to it. Limited long-term value. Mainly overhanging the site. Decay at base.	Owner to fell or cut back to boundary.	<10	U
T10	**Beech**	*Fagus sylvatica*	16	390	8	8	8	8	MA	1	Good	Located off site. Single stemmed tree of good shape and form. Low limbs over the site. Potential.	Remove the 1st 2 primary limbs to the northwest.	40+	B1
T11	**Alder**	*Alnus glutinosa*	11	600 est.	5	3	3	6	OM	1+	Poor	Single stemmed with a thick bole. Forked at 2m with decayed leader to the south. Ivy on stem. Severe decay to east from base. Reduced safe life expectancy. Not worthy of retention.	Owner to fell.	<10	U
T12	**Alder**	*Alnus glutinosa*	10	300	5	0	2	3	MA	1+	Fair	Single stemmed. Leaning to north over site. Reasonable shape and form. No major visible defects.	At present no action.	20-40	C1
T13	**Ash**	*Fraxinus excelsior*	17	450 est.	6.5	5	3	5	MA	4+	Poor	Located in the neighbouring property. Forked at 5m. Not fully surveyed but significant canker on its limbs. Deadwood and stubs.	Owner to remedially prune.	10+	C1

151105 Appendix 2: Tree Schedule - Ashbourne Road, Leek

No.	Species	Latin Name	Height (m)	Stem Diameter (mm)	Spread (m)				Age Class	Height of Crown Clearance (m)	Physiological Condition	Structural Condition	Preliminary Management Recommendations	Estimated Remaining Contribution (years)	Category Grading
					N	S	E	W							
T14	**Sycamore**	*Acer pseudoplatanus*	16	550 est.	6.5	6	4	6.5	M	4	Good	Single stemmed. Good shape and form. Not fully surveyed but no major visible defects.	No action.	40+	B1
T15	**Alder**	*Alnus glutinosa*	12	480 est.	6	0	4	4	M	1.5+	Fair	Thick base. Reasonable shape and form. Slightly one-sided. Stubs and deadwood. No major visible defects.	At present no action.	20-40	C1
G16	**Elder, Hawthorn, Holly, Sycamore, Beech, Rhododendron.**	*Sambucus nigra, Crataegus monogyna, Ilex aquifolia, Acer pseudoplatanus, Fagus sylvatica, Rhododendron*	<12	<200	See Plan				Y-M	0+	Fair	Understory vegetation to edge of neighbouring property drive with occasional sycamore and beech. Can be easily pruned back to the boundary with no detriment to the group.	At present no action.	20-40	C2



TREE CONSTRAINTS

- T1 — Retention Category A trees
- T1 — Retention Category B trees
- T1 — Retention Category C trees
- T1 — Category U trees: Trees to be removed due to health and safety reasons regardless of development
- Root Protection Areas:

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Client
Gree Gate Homes Ltd.

Project
Ashbourne Road, Leek

Description
Tree Constraints Plan

Status
Planning

Scale	Drawn
1:200@A1	GT

Job number	Drawing number	Date	Revision
3335	01	Nov 15	

Prospect Cottage

The Gables

43

1A

Care should be taken during removal of the out-buildings to prevent damage to any overhanging branches.

New drainage to connect to ext. sewer on Fair View Road to satisfaction of Severn Trent Water

R1

R2

R3

R3A

2.4m x 43m visibility splay

Existing path to be retained

Boundary treatment wall

Ashbourne Road

Mount Road

existing 30MPH speed limit to be extended to incorporate site access

existing trees to be trimmed back to fall outside the adopted highway to ensure adequate visibility is achieved

Plot 1

Plot 2

Plot 3

Plot 4

Plot 5

Plot 6

Plot 7

Plot 8

Plot 9

Plot 10

Plot 11

Plot 12

Adoptable Road

Private Drive

Easement

Easement

30743

22428

19451

6000

2.4m x 43m v

T1

T2

T3

T4

T5

T6

T7

T8

T9

T10

T11

T12

T13

T14

T15

G4

G6

G9

G16

T15 is to be removed enabling the kerb-line to be installed with little detriment to the other trees within the tree belt.

Protective fence line is set at 1.5m from the building gable to maximise root protection.

Stone

KEY

TREE SURVEY

- T1 — Existing trees to be retained and protected to BS5837:2012
- T1 — Existing trees to be removed
- Root Protection Areas: Calculated root zone areas (RPA) of the surveyed trees inline with BS5837:2012 recommendations.
- Proposed position of additional Tree Protection Fence which should be installed inline with BS5837:2012 recommendations and the AMS.
- Area of Special Measures

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Ashbourne Road, Leek

Description
Tree Protection Plan

Status
Planning

Scale	Drawn		
1:200@A1	GT		
Job number	**Drawing number**	**Date**	**Revision**
3335	03	Aug 16	-

ARBORICULTURAL SURVEY

Georgina Tearne MSc HND (Arboriculture) F.Arbor.A.
11th August 2016

SITE ADDRESS

Ashbourne Road
Leek

PREPARED FOR:

Green Gate Homes (NW) Ltd.

Table of Contents

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Appendix 1 – Survey Methodology

Appendix 2 – Tree Survey Data

Appendix 3 - Tree Work Schedule

1 BACKGROUND

1.1 Brief

This arboricultural report has been produced by Georgina Tearne in association DEP Landscape Architecture and commissioned by;

Green Gate Homes Ltd.

It is required as part of a planning application for the development of the site on:

Ashbourne Road
Leek

1.2 Documents provided

To assist in the production of this report I have been provided with a copy of the topographical survey produced by Powers & Tiltman Ltd. Ref: 7308/01 and a plan showing the proposed site layout produced by Jennings Design Associates Ref: 902 A002.

1.3 Tree Status

Prior to any work being carried out on site the status of the trees should be established and the appropriate permissions sought if any Tree Preservation Orders apply to the site. It is worth noting that any works specified within an approved planning application do not require further approval.

2 SURVEY DETAILS

2.1 Site Visit

2.1.1 Surveyor

Georgina Tearne MSc. H.N.D. Arboriculture. F.Arbor.A.

2.1.2 Date of Survey

5th November 2015

2.1.3 Other Persons Present

N/A

Weather Conditions

During the survey it was fine and generally bright.

2.2 Inspection Methods

A visual tree inspection was carried out from ground level of the vegetation within and 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 plans Ref: 3335.01 & 3335.03.

The positions of the trees included within this tree survey are based on the topographical survey provided although 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 currently utilised as a small holding with a collection of animals including hens and goats. There are a couple of small shelters within the field and it is fenced around the perimeter. A public footpath runs from the northern tip of the site with Ashbourne Road westward and parallel to the boundary.

3.1.2 Located on the limits of an area of residential properties trees border the site to the south and west and Ashbourne Road forms the eastern boundary.

3.2 Tree Population

3.2.1 There is one group of vegetation and possibly one individual located within the red line boundary. All the other trees identified in the survey are located off site in neighbouring properties. The surveyed population includes elder, hawthorn, holly, sycamore, beech, alder, ash, rowan and oak.

3.2.2 The trees surveyed total 16 items of vegetation which consists of 12 individual trees and 4 groups. 4 individual trees are categorised as 'B' while 7 individuals and 3 groups have been categorised as 'C' in accordance with BS5837:2102. The remaining group and individual have been categorised as 'U'.

3.2.3 Due to the nature of the site and the position of the trees the tree population within the site is considered to have a moderate amenity value although some items of vegetation have lower values individually than as part of the population overall.

4 TREE CONSTRAINTS

4.1 Root Protection Areas

4.1.1 The accompanying drawings (Ref: 3335.01 & 3335.03) 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 circular RPAs are considered to provide a reasonable guide to the extent of the rooting areas which should ideally be protected.

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 4 'B' individuals. In line with BS5837 the 'C' category trees can usually be retained at least in the short term although it is generally accepted that they should not influence the site proposals except where they are located off site and therefore will also need to 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 the RPAs. However, it may be possible to encroach into these areas where it can be shown that the construction techniques and materials to be used will not be detrimental to the overall well-being of 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 are to construct 6 pairs of semi-detached houses with an adoptable road accessing the site from Ashbourne Road.

5.2 Statutory Tree Protection

5.2.1 The status of the trees should be established prior to any works being carried out. It is however, worthy of note that any work identified within a planning approval will over-ride any existing legislative protection.

5.3 Tree Appraisal

5.3.1 It is proposed to remove only one individual tree to accommodate the new site entrance from Ashbourne Road. This is T15 a fully mature 'C' category Alder located on the boundary with Ashbourne Road. The removal of this tree will enable sight lines and the curve of the new road and footpath to be achieved. As this is the only individual tree to be removed it is felt that it should be acceptable.

5.3.2 G6 is also shown to be cut back to the boundary line. The stems to these young trees are located beyond the site boundary and thus it is only the overhanging branches that are proposed to be taken back to the boundary line. This will open up useable garden space and will have a limited impact on the neighbouring trees overall.

5.3.3 The majority of the site proposals will have little impact on the identified tree population although there is one area adjacent to plot 12 that poses potential concern. The position of the building cuts very slightly into the designated RPA and the tree is directly to the southeast of the building. Unfortunately the plot can't be moved due to the requirement for a 6m drainage easement connecting into an existing sewer on Fair View Road. However, even with space for construction over 95% of the tree's RPA can be protected and any works will have a limited impact on this 'C' category tree. Although the neighbouring trees here will cause some shading to the garden and property the existing canopy is over 3.5m

from the gable end of the house and there will be very little, if any, direct conflict with the building and roof etc.

5.3.4 The potential for damage to trees to be retained during construction through vehicle access and material storage etc. is a significant concern and therefore protective barriers should be installed as shown on the accompanying drawing ref (3335.03). These areas should be considered sacrosanct except were works are required and these should be carried out under close supervision of an arboricultural consultant.

5.4 Services and Other Considerations

5.4.1 With the exception of the easement the positions of the proposed services were not known at the time of this report. However, service trenches, to include drains etc., must not extend into any areas protected by barriers or within the RPAs of trees to be retained. It is felt that this should be achievable although further advice can be provided in this respect should it be required.

6 CONCLUSIONS

6.1 The tree population surveyed includes both trees within the site and directly beyond the site boundaries. The tree population is collectively considered to have a moderate amenity value.

6.2 The proposal for the site is to construct 6 pairs of semi-detached houses with an access road from Ashbourne Road.

6.3 One tree will be removed and one group cut back in order to accommodate the proposals having a very limited impact on the tree population overall.

6.4 There is one area of concern at plot 12. Unfortunately there isn't scope to move the plot due to the requirement for a 6m easement. However, it is felt that the overall impact is acceptable if not ideal.

6.5 Protective barriers as shown on the accompanying drawing should be installed to protect the trees.

6.6 All services must be installed beyond the areas defined by the RPAs and the protective barriers.

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

11/08/2016

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

Arboricultural Consultant

Arboricultural consultant for DEP Landscape Architecture

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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 at 1.5m above adjacent ground level. Stems of multi-stemmed trees are measured just above the buttress flare while where multiple stems emanate from ground level each stem is measured and the data is inputted into the calculation within the standard.

3. **Spread** - the measurement of the branch spread from the stem of the tree to the extent of the canopy in the direction of north, south, east and west.

4. **Crown Clearance** - measured from the highest point of the adjacent ground level in metres.

5. **Age Class** - described as young (Y), semi-mature (SM), early-mature (EM), 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 for Removal

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