TREE CONSULTANTS

ARBORICULTURAL REPORT

to BS 5837:2012 at:

Land North of Barnsley Road,
Wombwell
Barnsley
South Yorkshire

For:
Gareth Lloyd
Persimmon Homes West Yorkshire
3 Hepton Court,
York Road,
Leeds,
LS9 6PW

July 2013

Institute of Chartered Foresters
Registered Consultant

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Contents

1. Introduction

1.1 Instructions and Brief

1.1.1 I am instructed by Gareth Lloyd of Persimmon Homes West Yorkshire, to visit the site and prepare my findings in a report.

1.1.2 The report is required in accordance with *BS 5837:2012 Trees in relation to design, demolition and construction –Recommendations,* to provide detailed, independent, arboricultural advice on the trees present, in the context of potential development.

1.2 Survey Details

1.2.1 The survey took place during July 2013 by Adam Winson, Chartered Arboriculturist, MSc, BSc (Hons) MICFor, AIEEM (the author's qualifications and experience are included within **Appendix 1**).

1.2.2 The trees were surveyed visually from the ground using "Visual Tree Assessment" techniques and in accordance with the guiding principles of British Standard 5837:2012 (explanatory details regarding the survey methodology are included within **Appendix 2**).

1.2.3 A full explanation of the tree data can be found at **Appendix 3**. Full details of all the trees surveyed are found in **Appendix 4**. For tree locations please refer to the Tree Constraints Plan at **Appendix 5**.

2. The Site

2.1 Location

2.1.1 The site is located in the small town of Wombwell located in the Metropolitan Borough of Barnsley in South Yorkshire.

2.1.2 The tree survey was limited to the area within the red line, shown in the (2008) image below:

2.2 Site Description

2.2.1 The site currently consists of two arable field areas; the site is bisected by the A663.

2.2.2 The topography of the site is generally level.

3. The Trees

3.1 Legal

3.1.1 Due to the large potential penalties for illegally carrying out work to protected trees, before authorising any tree works a check should be made with the Local Planning Authority to see if the trees are covered by a Tree Preservation Order or if they are within a Conservation Area. If either applies, then statutory permission is required before any works can take place.

3.1.2 When appointing a tree surgeon, only properly qualified and experienced companies should used, who have adequate Public Liability and Employer's Liability Insurance. All tree work should be carried out according to British Standard 3998: 2010 *Tree Work - Recommendations*.

3.2 Vegetation Overview

3.2.1 Surrounding the site is a mix of existing housing and rural areas with a good distribution of trees in extensive woodland groups to the north.

3.3 Summary of Results

3.3.1 The tree survey revealed 34 items of vegetation comprised of 25 individual trees and 9 tree groups.

3.3.2 Of the surveyed vegetation: 1 tree group is retention category 'A', 3 groups are retention category 'B', 29 trees/groups are retention category 'C' and 1 group was category 'U' (explanatory details regarding the retention categories are included within Appendix 3).

3.3.3 The trees can be broadly grouped into lower value naturally regenerated trees scattered around the boundary of the site and higher value woodland groups situated beyond the northern boundary of both parcels of land.

3.4 Arboricultural Impacts

3.4.1 The central area of the site has no trees and so is free of any significant arboricultural implications.

3.4.2 If required by the development proposals, many of the lower value, retention category C trees could be removed, and replacement planting would largely mitigate their losses.

3.4.3 The higher value groups G1, G27 and G34 form valuable screening and should be retained throughout any development.

3.5 Protection of the Retained Trees

3.5.1 Most retained trees will require protection by fencing in accordance with BS 5837: 2012, during the development phase. The protective fencing should protect the Root Protection Area (RPA) of the trees as highlighted on the plan at Appendix 5.

3.5.2 If required by the Local Planning Authority, an associated Arboricultural Method Statement, detailing protective fencing specifications can be provided.

5. Signature

I trust this report provides all the required information.

Signed

.....

Adam Winson, *Chartered Arboriculturist, MSc, BSc (Hons), MICFor, AIEEM.*

4th July 2013

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Appendices

Appendix 1: Authors Qualifications & Experience

Mr Adam Winson *Chartered Arboriculturist, MSc, BSc (Hons), ND, MICFor, AIEEM.*

Experience
I have worked within the tree care profession for 16 years. I am a Chartered Arboriculturist and a Registered Consultant with the Institute of Chartered Foresters. My work ranges from individual expert tree inspections to managing trees on major multimillion pound housing and park developments and highway and infrastructure projects. My work often involves trees with Preservation Orders, insurance claims, subsidence claims and litigation. In 2010 I obtained an MSc in Arboriculture and Urban Forestry (with distinction), also gaining the top student award, and have had articles published in industry magazines and have original research published by the UK Forestry Commission.

Membership of Professional Bodies
Professional Member and Registered Consultant of the Institute of Chartered Foresters
Associate of the Institute of Ecology and Environmental Management

Education and Qualifications
MSc Arboriculture and Urban Forestry (Distinction) University of Central Lancashire - Myerscough College. 2006 -2009
BSc (Hons) Environmental Conservation 2:1. Sheffield Hallam University. 2002 2005
National Diploma in Arboriculture University of Lincoln/ Riseholme.1996-1998

Previous Experience
Consulting Arboriculturist at JCA Ltd. Halifax, Yorkshire 2005 to 2012
Freelance Arborist for various companies. Sheffield, South Yorkshire 2002 - 2005
Arborist for AAA Arbor /Sydney City Council Australia 2001- 2002
Arborist for The Tree Surgeon, Brisbane, Australia 2000- 2001
Groundsman/Climber at Lindsey Tree Services, Grimsby, Lincolnshire 1998 -2000
Groundsman/Climber at Freelance Baumpflege, Frankfurt, Germany 1998
Freelance Groundsman/Climber for various companies, Lincoln Area 1996-1998

Training, Awards & Qualifications
MSc Top Student Award University of Central Lancashire 2010
Bats and Bat Surveys- a foundation course for ecological consultants. BCT 2007
Arboriculture & Bats: A Guide for Practitioners BCT and AA 2007
CPRE: Prize for best BSc dissertation on the theme of land management 2006

Appendix 2: Survey Methodology and Limitations of Report

The survey was undertaken in accordance with British Standard 5837 (2012) *Trees in relation to design, demolition and construction –Recommendations.* The trees were assessed objectively and without reference to any proposed site layout. The trees were surveyed from the ground using 'Visual Tree Assessment' (VTA) methodology. VTA is appropriate and is endorsed by industry guidance. It is used by arboriculturists to evaluate the structural integrity of a tree, relying on observation of trees biomechanical and physiological features. Measurements are obtained using a diameter tape, clinometer, distometer and loggers tape. Where this is not practical measurements are estimated. Tree groups have been identified in instances as defined in BS 5837 (2012). Shrubs and insignificant trees may have been omitted from the survey.

This report represents a BS5837 tree survey and should not accepted as a detailed tree safety inspection report; however, tree related hazards are recorded and commented upon where observed, yet no guarantee can be given as to the absolute safety or otherwise of any individual tree. All recommended tree work must be to BS 3998: 2010 - '*Tree Work: Recommendations'*.

The findings and recommendations contained within this report are valid for a period of twelve months from the date of survey. The author shall not be responsible for events which happen after this time due to factors which were not apparent at the time, and the acceptance of this report constitutes an agreement with these guidelines and terms.

Appendix 3: Explanation of Tree Descriptions

HEIGHT of the tree is measured from the stem base in metres. Where the ground has a significant slope the higher ground is selected.

CROWN HEIGHT is an indication of the average height at which the crown begins and includes information of the first significant branch and direction of growth.

STEM DIAMETER is measured at 1.5 metres above (higher) ground level. Where the tree is multi-stemmed at this point; the diameter is measured close to ground level or else a combined stem diameter is calculated.

CROWN SPREAD is measured from the centre of the stem base to the tips of the branches in all four cardinal points.

AGE CLASS of the tree is described as young, semi-mature, early-mature, mature, or over-mature.

PHYSIOLOGICAL CONDITION is classed as good, fair, poor, or dead. This is an indication of the health of the tree and takes into account vigour, presence of disease and dieback.

STRUCTURAL CONDITION is classed as good, fair or poor. This is an indication of the structural integrity of the tree and takes into account significant wounds, decay and quality of branch junctions.

LIFE EXPECTANCY is classed as; less than 10 years, 10-20 years, 20-40 years, or more than 40 years. This is an indication of the number of years before removal of the tree is likely to be required.

Retention Categories

A (marked green on Appendix 5) = retention most desirable. These trees are of very high quality and value with a good life expectancy.

B (marked in blue on Appendix 5) = retention desirable. These trees are of good quality and value with a significant life expectancy.

C (marked in grey on Appendix 5) = trees which could be retained. These trees are of low or average quality and value, and are in adequate condition to remain until new planting could be established.

U (marked in red on Appendix 5) = trees for removal. These trees are in such a condition that any existing value would be lost within 10 years.

Appendix 4: Tree Descriptions and Recommendations

Appendix 5: Tree Constraints Plan

	Tree Species		Measurments					Crown (m)						Tree Condition							Value		Management	
Tree ID	***Common Name***	***Latin Name***	***Maturity***	***Height (m)***	***Stems***	***Stem Dia (mm)***	***Estimated***	***First branch***	***Ave Height***	***N***	***E***	***S***	***W***	***Roots***	***Stem***	***Crown***	***Comments***	***Physiology***	***Structural***	***Life Expectancy***	***Amenity***	***Category***	***Works***	***Priority***
G1	Birch, Ash, Sycamore Oak, Occasional Pine.	*Mixed*	Semi-mature	10	1	250	Yes	2 s	3	1	1	1	1	No visual defects	Single stemmed; Twin stemmed; Multiple stemmed	Normal; Minor deadwood	High value group situated beyond boundary. Little/no crowns are overhanging into site. Good screening value.	Good	Good	>40 yrs	High	**B**	No action	
T2	Sycamore	*Acer pseudoplatanus*	Semi-mature	7	4	120, 140, 150, 100	Yes	1 n	1	3	4	4	3	No visual defects	Multiple stemmed; at base; Tight union; Partially included bark	Normal	Situated on or beyond boundary. Natural regeneration.	Fair	Fair	20 to 40 yrs	Low	**C**	No action	
T3	Common Hawthorn	*Crataegus monogyna*	Semi-mature	3	1	140	No	1 n	0	2	1	1	2	No visual defects	Single stemmed	Normal	Natural regeneration along boundary.	Fair	Good	20 to 40 yrs	Low	**C**	No action	
T4	Sycamore	*Acer pseudoplatanus*	Young	4	1	100	No	1 w	1	2	1	1	1	No visual defects	Single stemmed	Normal	Natural regeneration along boundary.	Fair	Fair	20 to 40 yrs	Low	**C**	No action	
T5	Sycamore	*Acer pseudoplatanus*	Semi-mature	10	4	100, 110, 120, 100	No	2 w	2	3	4	4	4	No visual defects; Soil erosion	Multiple stemmed at base; Tight union	Normal	Natural regeneration along boundary. Growing against wall structure.	Fair	Fair	20 to 40 yrs	Low	**C**	No action	
T6	Common or Black Elder	*Sambucas nigra*	Semi-mature	4	1	130	No	1 n	0	2	1	2	2	No visual defects	Single stemmed	Minor deadwood	Natural regeneration along boundary	Fair	Fair	10 to 20 yrs	Low	**C**	No action	
T7	Sycamore	*Acer pseudoplatanus*	Semi-mature	5	2	110, 100	No	2 w	2	2	3	2	3	No visual defects	Twin stemmed; at base; Tight union	Small / sparse; Minor dieback	Natural regeneration along boundary	Poor	Fair	10 to 20 yrs	Low	**C**	No action	

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	Tree Species		Measurments					Crown (m)						Tree Condition							Value		Management	
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Dia (mm)*	*Estimated*	*First branch*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiology*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*	*Priority*
T8	Common Hawthorn	*Crataegus monogyna*	Semi-mature	4	1	180	No	1 n	0	4	3	3	4	No visual defects	Single stemmed; Multiple stemmed; at 1m	Normal	Natural regeneration along boundary	Fair	Fair	20 to 40 yrs	Low	**C**	No action	
G9	Common Hawthorn	*Crataegus monogyna*	Semi-mature	5	4	200	Yes	1 n	1	2	5	5	2	No visual defects	Single stemmed; Multiple stemmed	Normal	Natural regeneration, 4 shrubs/trees forming 1 crown.	Good	Fair	20 to 40 yrs	Low	**C**	No action	
T10	Sycamore	*Acer pseudoplatanus*	Young	4	1	150	No	1 n	1	2	2	2	2	No visual defects	Single stemmed	Normal	Natural regeneration	Good	Fair	20 to 40 yrs	Low	**C**	No action	
T11	Common Hawthorn	*Crataegus monogyna*	Young	3	1	100	No	1 n	1	1	1	1	1	No visual defects	Single stemmed	Normal	Natural regeneration along boundary	Good	Good	20 to 40 yrs	Low	**C**	No action	
T12	Myrobalan Plum	*Prunus cerasifera*	Semi-mature	5	1	180	Yes	2 n	2	3	3	3	3	No visual defects	Single stemmed	Normal; Overhanging adjacent land	Situated beyond boundary; limited access around tree base.	Fair	Fair	20 to 40 yrs	Low	**C**	No action	
G13	Common or Black Elder	*Sambucas nigra*	Semi-mature	3	3	100	No	1 n	0	3	2	2	2	No visual defects	Multiple stemmed; Single stemmed	Minor dieback	Natural regeneration along boundary. Limited long term future prospects.	Fair	Fair	10 to 20 yrs	Low	**C**	No action	
T14	Sycamore	*Acer pseudoplatanus*	Semi-mature	13	1	280	No	2 e	4	7	5	5	5	No visual defects	Single stemmed; Multiple stemmed at 3m	Normal; Overhanging adjacent land	Natural regeneration along boundary; reasonable long term future prospects.	Good	Good	>40 yrs	Low	**C**	No action	
T15	Sycamore	*Acer pseudoplatanus*	Semi-mature	8	1	180	Yes	3 n	3	3	2	2	2	No visual defects	Single stemmed	Normal	Natural regeneration along boundary, limited access around tree base.	Good	Fair	>40 yrs	Low	**C**	No action	

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	Tree Species		Measurments					Crown (m)						Tree Condition							Value		Management	
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Dia (mm)*	*Estimated*	*First branch*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiology*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*	*Priority*
T16	Black Poplar	*Populus nigra var betulifolia*	Early-mature	17	1	650	Yes	4 n	3	13	10	8	6	No visual defects	Multiple stemmed at 1m; Tight union; Partially included bark; Minor cavity	Unbalanced; Overhanging adjacent land; Moderate deadwood	Situated along boundary. Limited access around tree base. Poor form, limited future prospects.	Good	Poor	20 to 40 yrs	Mod	**C**	Consider pollard if area around tree to be developed.	
T17	Black Poplar	*Populus nigra var betulifolia*	Early-mature	17	1	700	Yes	3 w	4	8	9	9	10	No visual defects	Multiple stemmed at 1m; Minor cavities; Tight union; Partially included bark	Moderate deadwood; Unbalanced; Overhanging adjacent land; Snapped branches hanging in crown.	Situated on boundary. Limited access around tree base. Poor form with limited long term future prospects.	Good	Poor	10 to 20 yrs	Mod	**C**	Remove damaged branches; consider pollarding.	3 Mths
T18	Goat Willow	*Salix caprea*	Early-mature	9	1	450	Yes	2 e	2.5	4	5	4	5	No visual defects	Multiple stemmed at 1m; Tight union; Partially included bark	Overhanging adjacent land	Situated on boundary, limited long term future prospects.	Fair	Fair	10 to 20 yrs	Low	**C**	No action	
T19	Sycamore	*Acer pseudoplatanus*	Semi-mature	8	2	200, 250	Yes	3 n	3	4	4	3	3	No visual defects	Twin stemmed at 1m; Bark damage	Slightly unbalanced; Overhanging adjacent land	Situated beyond boundary; limited access around tree.	Fair	Fair	<10 yrs	Low	**C**	No action	
G20	Sycamore	*Acer pseudoplatanus*	Semi-mature	5	4	150	Yes	0	2	1	1	1	1	Decay	Single stemmed; Dead	All dead / absent	4 trees. Situated beyond boundary	Dead	Dead	<10 yrs	Low	**U**	Fell	
G21	Sycamore	*Acer pseudoplatanus*	Semi-mature	9	6	250		2 n	3	3	3	3	3	No visual defects	Single stemmed; Twin stemmed	Minor dieback	Situated beyond boundary; limited access around trees.	Fair	Fair	20 to 40 yrs	Low	**C**	No action	

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	Tree Species		Measurments					Crown (m)						Tree Condition							Value		Management	
Tree ID	***Common Name***	***Latin Name***	*Maturity*	*Height (m)*	*Stems*	*Stem Dia (mm)*	*Estimated*	*First branch*	*Ave Height*	*N*	*E*	*S*	*W*	***Roots***	***Stem***	***Crown***	***Comments***	*Physiology*	*Structural*	*Life Expectancy*	***Amenity***	***Category***	***Works***	***Priority***
G22	Common Hawthorn	*Crataegus monogyna*	Semi-mature	4	1	180	Yes	0	0	2	2	2	2	No visual defects	Single stemmed; Multiple stemmed	Normal	Unmanaged hedge feature along boundary.	Good	Fair	20 to 40 yrs	Mod	**C**	No action	
T23	Silver Birch	*Betula pendula*	Semi-mature	6	1	180	Yes	2 n	2	2	2	2	2	No visual defects	Single stemmed	Normal	Situated in garden area.	Fair	Fair	20 to 40 yrs	Low	**C**	No action	
T24	Silver Birch	*Betula pendula*	Semi-mature	6	1	180	Yes	2 n	2	2	2	2	2	No visual defects	Single stemmed	Normal	Situated in garden area.	Fair	Fair	20 to 40 yrs	Low	**C**	No action	
G25	Common or Black Elder	*Sambucas nigra*	Semi-mature	4	1	200	Yes	1 n	1	2	2	2	2	No visual defects	Multiple stemmed; Single stemmed	Normal	Unmanaged shrubs in garden area	Fair	Fair	10 to 20 yrs	Low	**C**	No action	
T26	Grey Poplar	*Populus canescens*	Young	5	1	160	No	2 w	2	2	3	2	2	No visual defects	Single stemmed	Normal		Good	Good	>40 yrs	Low	**C**	No action	
G27	Norway Maple (Occasional Field Maple, Sycamore, Thorn, Alder).	*Acer platanoides*	Semi-mature	6	1	150	Yes	1 n	2	2	2	2	2	No visual defects	Single stemmed; Twin stemmed; Multiple stemmed	Normal; Major dieback	Road side tree belt, situated beyond boundary. Minor crown overhang. Good screening value.	Good	Good	>40 yrs	Mod	**B**	No action	
T28	Sycamore	*Acer pseudoplatanus*	Semi-mature	6	2	160, 150	No	1 n	1	2	3	2	3	No visual defects	Twin stemmed at base; Tight union	Normal	Natural regeneration along boundary	Fair	Fair	20 to 40 yrs	Low	**C**	No action	
G29	Field Maple	*Acer campestre*	Semi-mature	5	1	180	No	1 w	2	3	3	3	3	No visual defects	Single stemmed; Multiple stemmed	Normal	Planting along road side, situated beyond boundary.	Good	Fair	20 to 40 yrs	Mod	**B**	No action	
T30	Sycamore	*Acer pseudoplatanus*	Semi-mature	7	4	130, 140, 140, 100	No	3 n	4	3	3	3	2	No visual defects	Multiple stemmed; at base; Partially included bark; Old pruning wounds	Normal	Situated beyond boundary	Fair	Fair	20 to 40 yrs	Low	**C**	No action	
T31	Sycamore	*Acer pseudoplatanus*	Semi-mature	7	1	220	No	3 w	3	3	2	2	3	No visual defects	Single stemmed	Normal		Good	Fair	>40 yrs	Low	**C**	No action	

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	Tree Species		Measurments					Crown (m)						Tree Condition							Value		Management	
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Dia (mm)*	*Estimated*	*First branch*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiology*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*	*Priority*
T32	Silver Birch	*Betula pendula*	Semi-mature	7	1	170	No	1 n	2	3	3	2	2	No visual defects	Single stemmed; Old pruning wounds	Slightly unbalanced		Fair	Fair	20 to 40 yrs	Low	**C**	No action	
T33	Field Maple	*Acer campestre*	Young	3	1	120	No	0	0	1	1	1	1	No visual defects	Single stemmed	Normal		Good	Good	20 to 40 yrs	Low	**C**	No action	
G34	Silver Birch (Occasional Maple. Ash, Thorn)	*Betula pendula*	Early-mature	13	1	300	Yes	2 n	4	3	3	3	3	No visual defects	Single stemmed; Twin stemmed; Multiple stemmed	Normal	High value woodland group; situated beyond boundary, clear of site - not fully inspected.	Good	Good	>40 yrs	High	**A**	No action	

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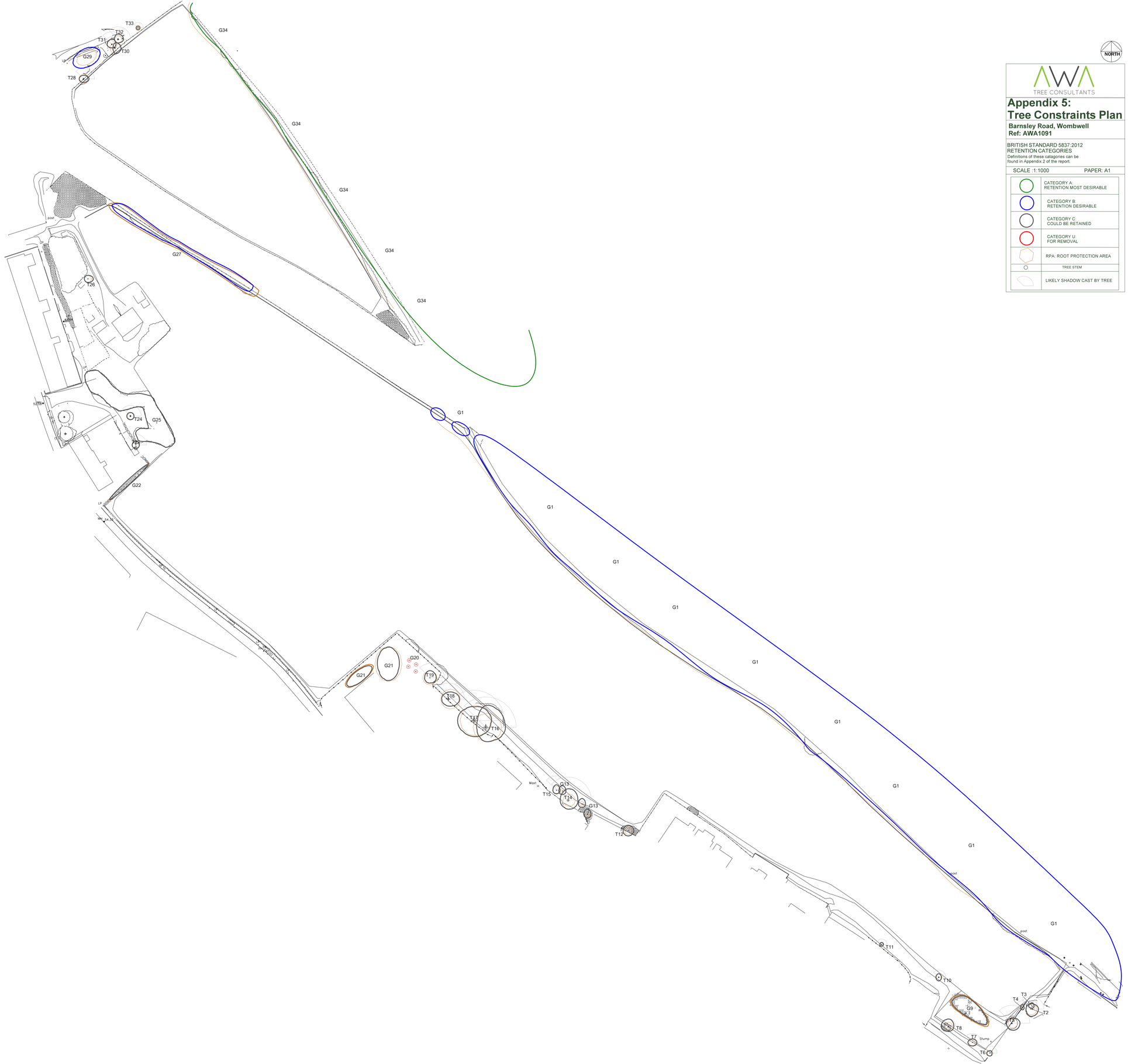

NORTH

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Appendix 5: Tree Constraints Plan

Barnsley Road, Wombwell
Ref: AWA1091

BRITISH STANDARD 5837:2012
RETENTION CATEGORIES
Definitions of these catagories can be found in Appendix 2 of the report.

SCALE :1:1000 PAPER: A1

	CATEGORY A: RETENTION MOST DESIRABLE
	CATEGORY B: RETENTION DESIRABLE
	CATEGORY C: COULD BE RETAINED
	CATEGORY U: FOR REMOVAL
	RPA: ROOT PROTECTION AREA
	TREE STEM
	LIKELY SHADOW CAST BY TREE