

ENVIRONMENT

Wordsworth Property Developments Ltd
Long Lane, Earlsheaton
Dewsbury
Arboricultural Survey

ENVIRONMENT

Wordsworth Property Developments Ltd
Long Lane, Earlsheaton
Dewsbury
Arboricultural Survey

Birmingham
Livery Place, 35 Livery Street, Colmore Business District, Birmingham, B3 2PB
T: 0121 233 3322

Leeds
Whitehall Waterfront, 2 Riverside Way, Leeds
LS1 4EH
T: 0113 233 8000

London
11 Borough High Street
London, SE1 9SE
T: 0207 407 3879

Manchester
4th Floor Carvers Warehouse, 77 Dale Street
Manchester, M1 2HG
T: 0161 233 4260

Nottingham
Waterfront House, Station Street, Nottingham NG2 3DQ
T: 0115 924 1100

March 2024

DOCUMENT ISSUE RECORD

Document Number:	LLE-BWB-ZZ-XX-T-EE-0003_Arboricultural Survey
BWB Reference:	243830

Revision	Date of Issue	Status	Author:	Checked:	Approved:
P01	March 2024	S2	B. Harrop BSc	D Brown TechArborA FdSc	Sarah Stone MSc BSc (Hons) MCIEEM

Notice

This document has been prepared for the sole use of the Client in accordance with the terms of the appointment under which it was produced. BWB Consulting Limited accepts no responsibility for any use of or reliance on the contents of this document by any third party. No part of this document shall be copied or reproduced in any form without the prior written permission of BWB.

CONTENTS

1. INTRODUCTION.....	1
Instruction	1
Site Description	1
Objectives	1
2. METHOD	2
3. RESULTS	4
4. RECOMMENDATIONS AND CONCLUSIONS	5

APPENDICES

- APPENDIX 1: Tree Constraints Plan
- APPENDIX 2: Site Photographs
- APPENDIX 3: Tree Survey Schedule
- APPENDIX 4: Classifications Description

1. INTRODUCTION

Instruction

- 1.1 This Arboricultural Survey has been undertaken on behalf of Wordsworth Property Developments Ltd ('the Client') in respect of a site off Long Lane, Earlsheaton, Dewsbury WF12 8LQ ('the Site'). The scope of work comprised a survey of all trees >75mm on Site undertaken on 8th March 2024.

Site Description

- 1.2 The Site is located to the south of Earlsheaton and is situated within a predominantly woodland and grassland environment. To the north of the Site is an area of residential properties off Woodburn Avenue with their associated gardens, the Site is bounded to the east by Chickenley beck with an area of woodland beyond. To the south of the Site is an agricultural holding. Access to the Site is from the west off Long Lane.
- 1.3 The Site is approximately 0.5 hectares (ha) in extent and is centred on grid reference SE 25743 20432. The Site is predominantly open ground of recently cleared vegetation, with all trees and hedgerows along the Site boundary to the north, east and south.

Objectives

- 1.4 The objectives of this report are to complete an arboricultural survey of the Site to inform design and mitigation recommendations for the Proposed Development.
- 1.5 An Arboricultural Impact Assessment and associated Tree Protection/Removal Plans will be produced at a later date, once development plans for the Site have been finalised.

2. METHOD

- 2.1 The arboricultural survey covers those trees or groups of trees which are considered relevant for the brief. During the survey, all relevant individual trees and groups of trees located within and close to the boundary of the Site were assessed. Trees with an estimated stem diameter of 75mm or more that overhang the Site or are located within a distance of up to 12 times their estimated stem diameter were included in the survey.
- 2.2 The objective of the survey was to collect tree data relevant to the proposed works at the Site and to categorise individual trees or tree groups in accordance with British Standard (BS 5837:2012): 'Trees in Relation to Design, Demolition and Construction – Recommendations'¹, based on their condition, quality and future potential.
- 2.3 As per BS 5837:2012, Section 4.5.2 *"The purpose of the tree categorisation method, which should be applied by the arboriculturist, is to identify the quality and value (in a non-fiscal sense) of the existing tree stock, allowing informed decisions to be made concerning which trees should be removed or retained in the event of the development occurring"*.
- 2.4 This survey should therefore be regarded as an initial appraisal with observations recorded for trees within and adjacent to the study area. Remedial tree works, foundation design and material specification are not covered within this report.
- 2.5 The locations for the trees on the Site are shown on the Tree Constraints Plan included in **Appendix 1** and are based on the supplied topographical survey drawing (Drawing ref no.: WEL-LL-001). Where trees have been identified that have not been picked up on the topographical survey, these have been added indicatively. Site photographs are also included in **Appendix 2**. To maintain good practice, it is recommended that all measurements be checked on-site prior to any works commencing. A detailed inspection of the trees with respect to decay, defects and hazard is not included with this report.
- 2.6 The Site survey was conducted by D. Brown Tech.Arbor.A (FdSc Arb) who has been working in the arboricultural industry for over eight years as an arborist, surveyor, contract manager and consultant and is a technical member of the Arboricultural Association.
- 2.7 Information collected during the survey included species, height, stem diameter, branch spread, height of crown clearance, age class, physiological condition, structural condition, estimated remaining contribution and category grade.
- 2.8 The survey was undertaken from ground level using a visual assessment of the tree canopy and stem. No removal of vegetation, digging or drilling was undertaken during the survey and parts of the stems of some trees remained partly obscured by fencing or vegetation. The weather conditions at the time of the survey were acceptable. All parts of the Site were fully accessed and there were no significant survey limitations.

¹ British Standard (BS 5837:2012): 'Trees in Relation to Design, Demolition and Construction – Recommendations', British Standards Institute, April 2012

2.9 No liability can be accepted in respect of the trees or for events which happen after the time of the survey.

3. RESULTS

- 3.1 The tree survey results are shown in the Tree Survey Schedule included as **Appendix 3**, which provides details of canopy spreads and Root Protection Areas (RPAs) of the trees included within the survey. The associated tree classification descriptions are shown in the 'Cascade Chart for the Quality Assessment' included as **Appendix 4**.
- 3.2 The RPAs have been calculated in accordance with Section 4.6 of BS 5837:2012. Although the RPA attempts to identify the area of each tree's root system which should be protected, the simplistic circles do not take account of constraints such as buildings, landform, walls etc., which may have restricted or influenced root development. Circular RPAs are considered to provide a reasonable guide to the extent of the likely rooting areas which should ideally be protected.
- 3.3 A Tree Protection Order (TPO) check was carried out through the Kirklees Council website (accessed March 2023). No trees within the survey area were found to be protected by a TPO.
- 3.4 Species identified within the survey consist of hawthorn *Crataegus monogyna*, sycamore *Acer pseudoplatanus*, ash *Fraxinus excelsior*, Douglas fir *Pseudotsuga menziesii*, sessile oak *Quercus petraea*, poplar *Populus sp.*, holly *Ilex aquifolium* and Leyland cypress *Cupressus x Leylandii*.
- 3.5 The trees included within this survey comprised eight individual trees, seven tree groups, one hedgerow and one woodland area.
- 1 Woodland group was classified as a Category A group;
 - 1 individual tree was classified as a Category B tree;
 - 3 tree groups were classified as Category B;
 - 6 individual trees were classified as Category C trees;
 - 3 tree groups were classified as Category C; and
 - 1 individual tree was classified as a Category U tree.

4. RECOMMENDATIONS AND CONCLUSIONS

- 4.1 W1 constitutes the woodland area falling outside the Site boundary to the east of the Site beyond Chickenley Beck. It contains a mixture of native broadleaf species including oak, willow and sycamore, with a good mix of age-classes, and structural diversity. As a woodland it is of high ecological and amenity value. It has been categorised as Category A due to its valuable contribution to the landscape.
- 4.2 G1 is a line of cypress and fir trees running along the south-western portion of the Site boundary, which are situated on the neighbouring land. They are likely to have been planted as a shelterbelt or screen for the adjacent agricultural buildings and are in good health. They have been categorised as Category B due to their collective landscape contribution.
- 4.3 G5 constitutes a line of mature and young-mature sycamores on the woodland edge to the east of the Site. As a group of trees, they have been categorised as Category B due to their good landscape contribution to the Site and surrounding area.
- 4.4 G6 is a dense line of young-mature leylandii running along the Site boundary located in an adjacent property to the north of the Site. They are young-mature trees with a good visual contribution to the surrounding area. They have been categorised as Category B due to their value in the landscape.
- 4.5 T2 is a mature sessile oak on the woodland edge in the eastern corner of the Site adjacent to the neighbouring property. There is evidence of a previous failure of a portion of the crown which is now hanging in the branches of the tree. This tree is of good habitat value and has been categorised as Category B due to its arboricultural and ecological value.
- 4.6 G2 is a line of young-mature spruce and ash trees running along the south-east of the Site boundary, located on the adjacent property, with H1, a hedgerow of hawthorn, running parallel. They have both been designated as Category C due to their visual contribution to the wider landscape.
- 4.7 T3, T4, T5, G3, and G4 are situated at the eastern end of the Site forming the edge of the existing woodland area, falling within the Site boundary. They are all young and young-mature trees which have been categorised as Category C due to their limited value in terms of their arboricultural qualities and landscape contribution.
- 4.8 T6, T7 and T8 are a mix of young-mature trees on the northern edge of the Site close to the rear gardens of the houses on Woodburn Avenue. They have been designated as Category C due to their limited value as individual specimens.
- 4.9 T1 is an ash tree which has failed at the base and is now leaning into the Site area, as such it is unsuitable for retention and has been classified as Category U.

Constraints to Development

- 4.10 All of the surveyed trees are located around the edge of the Site or outside the Site boundary and as such only represent a constraint to development should it occur close to the perimeter. Of particular note are the trees in G1, G2 and G6 which fall outside the Site boundary and are under third-party ownership.

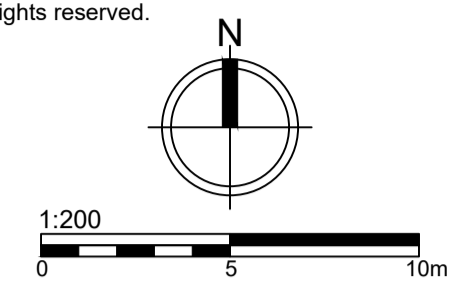
- 4.11 At the east end of the, Site T2 and G5 are Category B, and therefore represent a constraint to development. Where the Proposed Development encroaches into the RPAs of these trees, no-dig construction methods must be used in order to eliminate the need for excavation.

- 4.12 The Category C trees on the northern boundary (T6, T7 and T8) are of only minimal value and are considered not to present a significant constraint upon development, as their removal could be adequately compensated for with mitigation planting.

APPENDICES

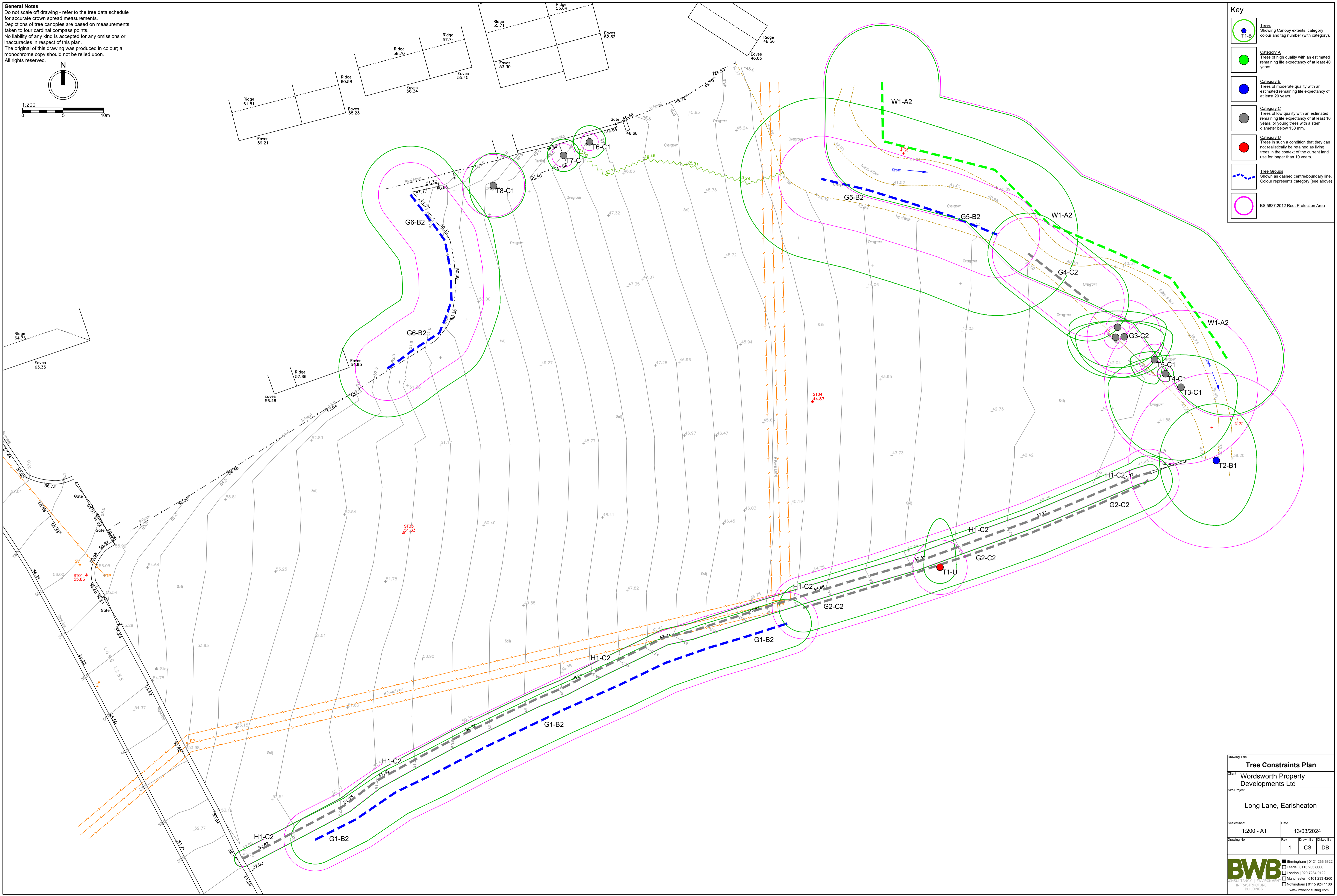
APPENDIX 1: Tree Constraints Plan

General Notes
 Do not scale off drawing - refer to the tree data schedule for accurate crown spread measurements.
 Depictions of tree canopies are based on measurements taken to four cardinal compass points.
 No liability of any kind is accepted for any omissions or inaccuracies in respect of this plan.
 The original of this drawing was produced in colour; a monochrome copy should not be relied upon.
 All rights reserved.



Key

- Trees
Showing Canopy extents, category colour and tag number (with category).
- Category A
Trees of high quality with an estimated remaining life expectancy of at least 40 years.
- Category B
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.
- Category C
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm.
- 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 10 years.
- Tree Groups
Shown as dashed centre/boundary line. Colour represents category (see above).
- BS 5837:2012 Root Protection Area



Tree Constraints Plan	
Client: Wordsworth Property Developments Ltd	
Site/Project: Long Lane, Earlsheaton	
Scale/Sheet: 1:200 - A1	Date: 13/03/2024
Drawing No:	Rev: 1
Drawn By: CS	Checked By: DB
Birmingham 0121 233 3322 Leeds 0113 233 8000 London 020 7234 9122 Manchester 0161 233 4200 Nottingham 0115 924 1100 www.bwbconsulting.com	

APPENDIX 2: Site Photographs



Photograph 1: H1 and G1



Photograph 2: G2 and T1



Photograph 3: Further picture of T1



Photograph 4: T2



Photograph 5: T3



Photograph 6: T4 and T5 in front with G3 behind to the left.



Photograph 7: G4



Photograph 8: G5



Photograph 9: Looking across the north border towards T6 – T8



Photograph 10: G6

APPENDIX 3: Tree Survey Schedule

No.	Species (Common Name)	Age Class	Height (m)	Crown Spread (m)				Crown Clearance (m)	Stem Diameter (mm)	Physiological Condition	Structural Condition	Estimated Remaining Contribution (Years)	Comments	Recommendations	Retention Category (Sub Category)	RPA (m)
				N	E	S	W									
INDIVIDUAL TREES																
T1	Ash	D	8	6	2	2	2	0	280*	P	P	<10	Tree which has failed and is now leaning into site area	Remove	U	35.47
T2	Sessile oak	M	22	7	5	8	7	1	900	G	F	30+	Stem failure in past which has damaged other stems. Failed crown still hanging in tree.	Retain where possible	B1	366.44
T3	Poplar	YM	22	4	7	9	9	0	790	G	G	30+	Three stems with trifurcation at base. Damage on stems with failures in past.	Retain due to third party ownership	C1	282.34

No.	Species (Common Name)	Age Class	Height (m)	Crown Spread (m)				Crown Clearance (m)	Stem Diameter (mm)	Physiological Condition	Structural Condition	Estimated Remaining Contribution (Years)	Comments	Recommendations	Retention Category (Sub Category)	RPA (m)
				N	E	S	W									
T4	Oak	Y	5	1	1	1	1	1	80	G	G	30+	Young tree at edge of woodland	Retain due to third party ownership	C1	2.90
T5	Sycamore	Y	7	1	1	3	3	0	160	G	G	0+	Young tree at edge of woodland	Retain due to third party ownership	C1	11.58
T6	Holly	YM	3	2	2	2	2	0	90*	G	G	30+	Dense canopy restricting inspection.	Retain or remove as per development plans	C1	3.66
T7	Leylandii	YM	4	2	2	2	2	0	120*	G	G	30+	Dense canopy restricting inspection	Retain or remove as per development plans	C1	6.51
T8	Cypress	YM,	7	4	4	4	3	0	320*	G	G	30+	Dense ground vegetation	Retain or remove as per development plans	C1	46.32
Groups of Trees																

No.	Species (Common Name)	Age Class	Height (m)	Crown Spread (m)				Crown Clearance (m)	Stem Diameter (mm)	Physiological Condition	Structural Condition	Estimated Remaining Contribution (Years)	Comments	Recommendations	Retention Category (Sub Category)	RPA (m)
				N	E	S	W									
G1	Cypress, fir	YM	13	3	3	3	3	0	320	G	G	30+	Row of trees adjacent to site boundary. No landscape value	Retain due to third party ownership	B2	46.32
G2	Spruce, ash	YM	16	3	3	3	3	0	320*	G	G	30+	Row of trees on adjacent land	Retain due to third party ownership	C2	46.32
G3	Sycamore	M	18	2	6	5	6	0	380, 120, 120	G	G	30+	Three stems at edge of woodland ivy clad with crowns overhanging site area.	Retain due to third party ownership	C2	65.33

No.	Species (Common Name)	Age Class	Height (m)	Crown Spread (m)				Crown Clearance (m)	Stem Diameter (mm)	Physiological Condition	Structural Condition	Estimated Remaining Contribution (Years)	Comments	Recommendations	Retention Category (Sub Category)	RPA (m)
				N	E	S	W									
G4	Sycamore	YM - M	21	5	5	5	5	0	370	G	F	30+	Line of trees adjacent to site. two trees have failed stems which has since produced re growth. canopy overhanging into site area.	Retain due to third party ownership	C2	61.93
G5	Sycamore	YM - M	21	10	10	10	10	1	440	G	G	30+	Line of trees adjacent to site. Large canopies overhanging into site. Small volume of deadwood.	Retain due to third party ownership	B2	87.58

No.	Species (Common Name)	Age Class	Height (m)	Crown Spread (m)				Crown Clearance (m)	Stem Diameter (mm)	Physiological Condition	Structural Condition	Estimated Remaining Contribution (Years)	Comments	Recommendations	Retention Category (Sub Category)	RPA (m)
				N	E	S	W									
G6	Leylandii	YM	12	6	6	6	6	0	330*	G	G	30+	Line of trees along boundary on adjacent site. Good visual screen with dense canopy.	Retain due to third party ownership	B2	49.27
Hedgerow																
H1	Hawthorn	YM	3	1	1	1	1	0	80	G	G	30+	Long hedgerow along south boundary. Good screening.	Retain or remove as per development plans	C2	2.90
Woodland																
W1	Willow, oak, sycamore	Y-M	Up to 22	/	/	/	/	0	Up to 600	G	G	30+		Retain due to third party ownership	A2	162.86

Key

- No. – Tree/group reference number, to be recorded on tree survey plan where necessary.
- Species – Common Names.
- Age Class – Young (Y), Young Mature (YM), Middle Mature (MM), Mature (M), Over Mature (OM).
- Height – Overall height of tree in metres.
- Crown Spread – In meters taken at the four cardinal points to derive an accurate representation of the crown (to be recorded on the tree survey plan where necessary).
- Crown Clearance – in meters above adjacent ground level to inform on ground clearance, crown stem ratio and shading.
- Stem Diameter – In millimetres at 1.5m above adjacent ground level (on sloping ground to be taken on the upslope of the tree base) or immediately above the roof flare for multi-stemmed trees. * Denotes estimated measurement where access to stem was restricted.
- Physiological Condition – e.g. Good (G), Fair (F), Poor (P) and Dead (D).
- Structural Condition – e.g. collapsing, the presence of decay and any physical defect.
- Estimated remaining contribution – in years e.g. less than 10, 10-20, 20-40, more than 40.
- Recommendations – Including further investigations of suspected defects that require more detailed assessment and potential wildlife habitat. All tree work is based on current tree condition and the existing land use and will include work such as hazard abatement, encroachment pruning, thinning of groups/woods and good arboricultural practice.
- Retention Category (Sub Category) – U or A to C, to be recorded in plan on the tree survey plan where possible.
- RPA – Root Protection Area calculated from BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations, in sqm. Where indicated, dimensions of radius of circle or sides of square based around centre point of trunk calculated for design purposes.

APPENDIX 4: Classifications Description

Cascade Chart for the Quality Assessment (Taken from BS5837:2012 Table 1, Page 9)				
Category and Definition	Criteria (Including Subcategories Where Appropriate)			Identification on Plan
	1 Mainly Arboricultural Qualities	2 Mainly Landscape Qualities	3 Mainly Cultural Values, Including Conservation	
TREES UNSUITABLE FOR RETENTION				
<p>Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years</p>	<p>Trees that have serious, irremediable, structural defect, such that their early loss is expected due to collapse including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning). Trees that are dead or are showing signs of significant, immediate or irreversible overall decline. Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low-quality trees suppressing adjacent trees of better quality.</p> <p><i>Note: Category U trees can have existing or potential conservation value which it might be desirable to preserve.</i></p>			<p>See Appendix 3</p>
TREES TO BE CONSIDERED FOR RETENTION				
<p>Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years</p>	<p>Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features e.g., the dominant and/or principal trees within an avenue.</p>	<p>Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.</p>	<p>Trees, groups or woodlands of significant conservation, historical, commemorative or other value e.g., veteran or trees or wood pasture.</p>	<p>See Appendix 3</p>

Cascade Chart for the Quality Assessment (Taken from BS5837:2012 Table 1, Page 9)

Category and Definition	Criteria (Including Subcategories Where Appropriate)			Identification on Plan
	1 Mainly Arboricultural Qualities	2 Mainly Landscape Qualities	3 Mainly Cultural Values, Including Conservation	
<p>Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years</p>	<p>Trees that might be included in Category A, but were downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation.</p>	<p>Trees present in numbers, usually growing groups or woodlands, such that they attract a higher collective rating than they might attract as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.</p>	<p>Trees with material conservation or other cultural value.</p>	<p>See Appendix 3</p>
<p>Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter of <150mm</p>	<p>Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.</p>	<p>Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits.</p>	<p>Trees with no material conservation or other cultural value.</p>	<p>See Appendix 3</p>



A **CAF** GROUP COMPANY

