

LAKELAND TREE CONSULTANCY ARBORICULTURAL PLANNING SPECIALIST

Arboricultural Impact Assessment

Land adjacent to Southport House Sawley BB7 4LE

December 2022

Project details

Job no.	LTC096									
Site	Land adjacent to Southport House, Sawley, BB7 4LE									
Clients	Mr Turner and Mr Dawson									
Architect	Zara Moon Architects									
Arboriculturist	Jennie Keighley PhD MSc MArborA									
Local authority	Ribble Valley Borough Council									
Date	14 December 2022									
Issue	Final issue for planning									

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1. Executive Summary

- 1.1 This arboricultural impact assessment relates to a planning application at the site in question for the demolition of the existing derelict buildings and subsequent erection of two detached dwellings.
- 1.2 Six individual trees and two groups of trees with potential to be impacted by the works were surveyed. Assessment of the proposal plan indicates that construction of the development will require the partial removal of one low quality group in order to facilitate the demolition works. One further low quality tree will require some minor facilitation pruning works.
- 1.3 Numerous new trees are proposed along the shared access lane in order to compensate for the development-related losses, the specification, delivery and aftercare of which can be secured by means of a condition attached to a planning approval.
- 1.4 The retained trees can be adequately protected by means of BS5837-specification tree protection fencing, which is to be laidout as shown on the appended tree protection plan, and by following the tree protection recommendations made herein.



2. Introduction

- 2.1 The clients' agent, Zara Moon Architects, instructed Lakeland Tree Consultancy to survey the trees at the site in question and undertake an arboricultural impact assessment (AIA) in relation to a planning application for the demolition of the existing derelict former agricultural buildings and subsequent erection of two detached residential dwellings.
- 2.2 Arboriculturist Jennie Keighley PhD MSc MArborA visited the site on 21 September 2021 and surveyed all trees with reasonable potential to be impacted by the proposed works in accordance with the British Standard guidance, BS5837 (2012) *Trees in relation to design, demolition and construction Recommendations*.
- 2.3 This report will assess the potential impacts of the proposed development upon the existing tree population and outline the tree protection measures needed to prevent retained trees from being damaged during the construction works. It should be supplied to the Local Planning Authority (LPA) to allow them to determine the planning application and its contents should be adhered to by the appointed contractor, should the development be approved.



3. The Site and Tree Population

- 3.1 The site is located in the village of Sawley, Lancashire, and is currently a former agricultural complex comprising four large derelict buildings, one of which has collapsed, each with a corresponding silo (see Figure 1). Vehicular access is available from the main Sawley road via a shared access lane. The site is bounded to the north by a tree-lined brook and to the east, south and west by agricultural pasture.
- 3.2 The survey identified six individual trees and two groups of trees with potential to be impacted by the proposed development works. The positions of the surveyed trees in relation to the existing site are shown on the appended tree survey plan.
- 3.3 The retention value of the surveyed trees was categorised using the guidance given in Table 1 of BS5837 (2012), which is explained in the appended tree survey schedule. Three individual trees were categorised as moderate quality (B-category) and the other three individual trees and the two groups were categorised as low quality (C-category).



Figure 1: Google Earth image of application site (dated 7 September 2021)



4. The Development Proposal and Arboricultural Impact Assessment

- 4.1 The proposed site plan provided (drawing number P01.01), by Zara Moon Architects, indicates that the proposal is for the demolition of the existing derelict former agricultural buildings and the subsequent erection of two detached residential dwellings, each with an independent access off the existing shared access lane.
- 4.2 The proposed site plan provided does not show proposed services or drainage at this stage, although it is expected that these will utilise existing infrastructure to some extent. Any new service trenches or drainage features required, such as sewage treatment plants or surface water attenuation ponds, must be sited so as to avoid the root protection areas (RPAs) of the retained trees.
- 4.3 As shown on the appended tree protection plan and in Table 1, below, construction of the development as proposed will require the partial removal of low quality overgrown group G2, which will require pruning back towards the site boundary to provide clearance from the existing buildings to be demolished.

Tree works

4.4 As shown in Table 1, some facilitation pruning will be required to retained ash tree T2, the crown of which is close to and slightly overhanging one of the buildings to be demolished.



- 4.5 All tree works should be carried out by a suitably qualified, experienced and insured arborist in accordance with the British Standard guidance BS3998 (2010) *Tree work recommendations*.
 - Table 1: Arboricultural impacts of the proposed development

ID no.	BS5837 cat.	Recommendation												
G2	С	Remove part of overgrown group in order to create suitable clearance from proposed demolition works as shown on the appended tree protection plan Retain outer edge of group as a screen and re-establish remaining trees as a managed native boundary hedge,												
		if desired												
T2	С	Prune to lift crown and/or reduce lateral spread to create suitable clearance from existing building to be demolished												
Total arboricultural impacts		Removals:1no. partial C-category groupPruning:1no. C-category tree												

Compensatory tree planting

4.6 Numerous new trees are proposed along three substantial planting buffers lining the shared access lane at the site frontage, which will more than adequately compensate for the development-related tree losses. The specification, delivery and aftercare of new tree planting can be secured by means of a suitably worded condition attached to a planning approval and should be implemented in accordance with the British Standard guidance, BS8545 (2014) *Trees: from nursery to independence in the landscape - Recommendations*.



5. Protection of Retained Trees

Tree protection fencing

- 5.1 Adequate protection of the retained trees during the development is paramount in ensuring their health and survival. Creating a construction exclusion zone by erecting temporary fencing around the perimeter of the trees' root protection areas (RPA) is the most effective way of protecting them during the works. It is important that tree protection fencing is secured into the ground, so that it cannot be easily moved whilst the construction works are underway.
- 5.2 For the development in question, the default BS5837 (2012) tree protection fencing specification, as shown on the appended illustration, is expected to be suitable. The fencing is to be be laid-out as indicated on the appended tree protection plan prior to any works on site, including deliveries, and shall remain in place until the development is complete. Once erected, the tree protection fencing should be labelled at regular intervals with all-weather notices stating 'TREE PROTECTION AREA KEEP OUT!'.



General tree protection recommendations

5.3 The following recommendations should be heeded throughout the development in order to prevent damage to retained trees: -

- The tree protection fencing shall be installed prior to any works on site, with the exception of tree works and vegetation removal
- Once in place, the tree protection fencing shall not be moved until the development is complete, unless authorised in advance by the Project Arboriculturist or LPA Tree Officer
- Vehicles and plant shall not operate within RPAs, unless there is an existing hard surface in place or load-appropriate ground protection has been installed
- Soil levels within RPAs shall not be raised or lowered, unless authorised in advance by the LPA
- Soil shall not be scraped, skimmed or mechanically compacted within RPAs. The majority of tree roots are found in the top 600mm of soil, so even a shallow scrape can cause detrimental root damage
- Materials, equipment, vehicles, skips, demolition arisings, stone or earth shall not be stored within soft-surfaced RPAs
- Oil, fuel, chemicals, cement or any other material with potential to cause damage to trees shall not be poured, stored, mixed, washed or discharged within tree RPAs. Consideration shall also be given to the topography of the site to prevent materials running towards trees
- Services and drainage shall not be installed below ground level within RPAs, unless authorised in advance by the LPA
- Surface water run-off shall not be re-diverted into or out of RPAs
- Fires shall not be lit within 15m of any tree crown or RPA
- Temporary buildings, including welfare units and portable toilets, shall not be sited within RPAs
- Notice boards, telephone cables, anchorage for equipment or any other services shall not be attached to trees
- Deliveries by crane shall be supervised by the site manager, ensuring the vehicle operates in a manner in which trees are not put at risk of damage



6. Tree Preservation Orders, Conservation Areas and Other Legal Constraints

- 6.1 Trees may be subject to legal protection, by means of being covered by a Tree Preservation Order (TPO) or by being located within a Conservation Area. It is an offence to cut down, uproot, top, lop, cause wilful damage or destruction of protected trees without the appropriate consent from the Local Authority. Fines for carrying out unauthorised works to protected trees can be considerable. The Local Authority must be given six-weeks' notice prior to the removal of trees within a Conservation Area with a stem diameter greater than 75mm (at a height of 1.5m above ground level). To carry out works on trees covered by a TPO, a formal application must be made to the Local Authority, which should be determined within an eight-week period.
- 6.2 According to Ribble Valley Borough Council's website, the site is not located within a Conservation Area. The Council's website (https://www.ribblevalley.gov.uk/downloads/download/263/list-of-tree-preservation-orders-tpo-; searched 21 November 2022) does not list any TPOs for this site, although it is advisable to check directly with the Council prior to carrying out any tree works that are not authorised as part of a detailed planning approval.
- 6.3 It should be noted that, subject to certain exemptions, a felling license must be obtained from the Forestry Commission for felling of trees that will equate to more than five cubic metres of timber in a calendar quarter. This does not, however, apply to tree removals that are authorised under a detailed planning approval.



- 6.4 Hedgerows meeting a particular series of criteria may be classed as 'important' and afforded legal protection under the Hedgerows Regulations 1997. It is an offence to remove an important hedgerow without appropriate consent from the Local Authority.
- 6.5 Birds, bats and certain other species are protected by the Wildlife and Countryside Act 1981. It is an offence to disturb wild birds within the nesting season (from March to August inclusive) and bats at any time of year, and this must be taken into account whilst carrying out tree works. The advice of a suitably qualified and licensed ecologist must be sought if the presence of birds, bats or other protected species is identified before or during tree works.

References

British Standards Institute (2014) *BS8545 Trees: from nursery to independence in the landscape - recommendations* British Standards Institute (2012) *BS5837 Trees in relation to design, demolition and construction - recommendations* British Standards Institute (2010) *BS3998 Tree work - recommendations*







Tree Survey Plan

BS5837 Tree retention categories:

Tree Survey Schedule Summary										
ID No.	No. Species									
T1	Sycamore	В								
T2	Ash	С								
Т3	Alder	В								
T4	Hawthorn	С								
T5	Beech	В								
Т6	Cherry	С								
G1	Various	С								
G2	G2 Various									



Identification numbers:

T = individual tree G = group of trees H = hedge W = woodland

Site:

Land adjacent to Southport House Sawley BB7 4LE

Clients:

Mr Turner and Mr Dawson

Date:	September 2021
Scale:	1:500 at A2
Drawing:	LTC096-TSP
Drawn by:	JK



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Telegraph pole

Sawley

BB7 4LE

Clients:

Tree Survey Schedule Summary											
ID No.	Species	Cat.	Recommendation								
T1	Sycamore	В	Retain								
T2	Ash	С	Retain								
T3	Alder	В	Retain								
T4	Hawthorn	С	Retain								
T5	Beech	В	Retain								
T6	Cherry	С	Retain								
G1	Various	С	Retain								
G2	Various	С	Remove part								

Date:November 2022Scale:1:500 at A2Drawing:LTC096-TPPDrawn by:JK

Mr Turner and Mr Dawson



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BS5837 Tree Protection Fencing



Reproduced from BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations, BSI Standards Institution 2012.

TREE PROTECTION AREA KEEP OUT!

TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND ARE SUBJECTS OF A TREE_PRESERVATION ORDER (TOWN & COUNTRY PLANNING ACT 1990)

CONTRAVENTION OF TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION

THE FOLLOWING MUST BE OBSERVED BY ALL PERSONS:-

- THE PROTECTIVE FENCING MUST NOT BE REMOVED
- NO PERSON SHALL ENTER THE PROTECTED AREA
- NO MACHINE OR PLANT SHALL ENTER THE PROTECTED AREA
- NO MATERIALS SHALL BE STORED IN THE PROTECTED AREA
- NO SPOIL SHALL BE DEPOSITED IN THE PROTECTED AREA
- NO EXCAVATION SHALL OCCUR IN THE PROTECTED AREA

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY

Tree protection fencing shall be installed as shown in the specification on the left and shall be labelled at regular intervals with all-weather notices, such as that shown above, stating "TREE PROTECTION AREA - KEEP OUT!"



BS5837 Tree Survey Schedule

The trees surveyed have been assigned one of the following categories, in line with the guidance outlined in British Standard 5837 (2012) *Trees in relation to design, demolition and construction - Recommendations*: -

A Trees of high quality with an estimated remaining life expectancy of at least 40 years
 B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years
 C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm
 U Insuitable for retention 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

T G	Tree Group	Age is classed as either: young; semi-mature, early-mature, mature or post-mature
W H	Woodland Hedge	Life expectancy is classed as either: <10 years; 10+ years; 20+ years or 40+ years
RPA	De ct protoction oraș	The radial RPA is calculated as twelve times the stem diameter and represents the area where protection of the tree roots during development works is essential to the tree's future health and survival
	Root protection area	Where the RPA is not shown as circular on the tree survey plan, it may have been modified to take account of built structures such as buildings, roads or retaining walls
#	Estimated values	Measurements may have been estimated where the tree is inaccessible, such as if it is located on neighbouring land or if the stem is heavily covered in ivy
		Where trees have multiple stems, an average stem diameter may be given
≤≥≈	For groups of trees and	hedges, measurements for the largest individual will be given or average measurements may be given where the

individuals are approximately uniform

BS5837 Tree survey schedule

Land adj. Southport House, Sawley, BB7 4LE Surveyor Site

Jennie Keighley PhD MSc MArborA

Survey date 21 September 2021 Job no.

Clients Mr Turner and Mr Dawson Conditions

Bright sun, thin cloud, gentle breeze

LTC096

ID no.	Species Latin name	Stem diameter (mm)	Age	Height (m)#	(5	Crown spread (m)	Crown clearance (m)	Structural condition Physiological condition	Life expectancy (years)	Radial RPA (m)	BS5837 category	General observations	
T1	Sycamore Acer pseudoplatanus	250 250 #	Early- mature	15	N E S W	5 5 5 5	3	Good Good	20+	4.2	в	 Located on neighbouring land and therefore not accessed to inspect in detail Growing in garden of neighbouring house, on opposite side of a stone-built culvert 	
T2	Common ash	400	Early- mature	15	NESV	8.5 8.5	3	Moderate/ Good	10+	6.8	C	 Growing on opposite side of brook Growing within group G1 Densely covered in ivy Minor twig distortions on northern side of crown may be indicative of early stages of 	
	Fraxinus excelsior	400 #		15		8.5 8.5		Moderate/ Good		0.0	0	 Infection with ash dieback disease (fungal pathogen <i>Hymenoscyphus fraxineus</i>) Condition may decline rapidly if infected Lower crown close to and slightly overhanging existing building 	
T3	Common alder	750 # ^{Mature}		14	N E S	5 5 5	0	Good	20+	9	В	 Growing on opposite side of brook Unable to fully inspect base due to dense ground vegetation and lower branches 	
	Alnus glutinosa			W 6.5 Good		Good				ground vegetation and lower branches			
T4	Hawthorn	200 150		8	N E	3 3	0.5	Good	10+	2.0	C	 Grown-own hedge remnant by fence corner Lower stem distortions suggest tree was 	
	Crataegus monogyna	100 #		U	S W	3 3	0.0	Good	10+	0.2	C	Lower stem distortions suggest tree was historically laid	



BS583	7 Tree survey so	chedule										
Site	Land adj. South	port House	e, Sawl	ey, BB7	4LE	Surveyor	Jennie Ke	Jennie Keighley PhD MSc MArborA				21 September 2021
Clients Mr Turner and Mr Dawson						Conditions	Bright su	Bright sun, thin cloud, gentle breeze Job nc			Job no.	LTC096
ID no.	Species	Stem diameter	Age	Height	Crown	Crown	Structural condition	Life expectancy	Radial RPA	BS5837	General observations	
	Latin name	(mm)	Age	(m)#	(m)	(m)	Physiological condition	(years)	(m)	category	Concia	
	European beech				N 5.5		Good			-		
T5	670		70 Mature		S 5.5	0		20+ 8.04		В	 No significant visi 	ible defects

Good

Good

Good

0.5

W 5.5

N 4

E 4 S 4

W 4

6

Mature

G1	Hawthorn Hazel Elder Sycamore Common ash Common alder Scots pine Norway spruce	≤ 200 200	Young	5	NE	≤ 4.5 ≤ 4.5	≥	Moderate to Good	20+	+ ≤ 4.2	C	 Fragments of dense linear group growing along opposite side of brook
	Crataegus monogyna Corylus avellana	200 200 #	mature	15	S W	≤ 4.5 ≤ 4.5	0		20+	4.2	C	 Ivy-covered in places
	Sambucus nigra Fraxinus excelsior Alnus glutinosa Pinus sylvestris Picea abies							Moderate to Good				



Street tree located on neighbouring landNot inspected in detail

С

2.4

10+

Fagus sylvatica

Flowering cherry

Prunus serrulata

Τ6

200 #

BS5837	<pre> Tree survey sched</pre>	lule											
Site	Land adj. Southport	House, Sa	awley, I	BB7 4L	E Sui	rveyor	Jennie Keigł		IArborA	Survey date	21 September 2021		
Clients	nts Mr Turner and Mr Dawson				Co	nditions	Bright sun, tl	hin cloud, g	entle b	reeze	Job no.	LTC096	
ID no.	Species Latin name	Stem diameter (mm)	Age	Height (m)#	Crown spread (m)	Crown clearance (m)	Structural condition Physiological condition	Life expectancy (years)	Radial RPA (m)	BS5837 category	General observations		
G2 Cr Aes	Hawthorn Elder Butterfly bush Common ash Horse chestnut rataegus monogyna Sambucus nigra Buddleia sp. Fraxinus excelsior culus hippocastanum	≤ 200 #	Young to mature	≤ 10	N ≤ 3 E ≤ 3 S ≤ 3 W ≤ 3	≥ 0	Poor to Good Poor to Good	10+	≤ 2.4	С	 Overgrown group growing around site boundary Unable to access in full due to dense ground vegetation Includes a number of young ash trees with crowns exhibiting signs of moderate to advanced terminal infection with ash dieback disease 		

