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Sawley Hall Sawley, Clitheroe

Arboricultural Report

Report for Mr & Mrs Bannister

September 2013



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1. INTRODUCTION

1.1 Scope and Brief

This arboricultural report was commissioned to accompany a planning application to construct a replacement house, access drive and gatehouse on land at Sawley, near Clitheroe.

The scope of the report was to carry out a tree survey of the areas affected by the proposed construction. The survey would be carried out in accordance BS5837:2012 'Trees in Relation to Design, Demolition and Construction – Recommendations'. This would determine the size, condition and value of trees and provide recommendations root protective distances to ensure the future health and stability of the retained trees.

The report assesses the impact of the proposed construction works on the trees and provides recommendations for their protection, as well as recommendations for facilitative and remedial pruning and felling works that are necessary to implement the scheme and to address defects in the retained trees.

This report assesses the arboricultural value of the site and the impact of the development proposal on this. It does not consider the ecological value of the site or the impacts on woodland considered as an ecological habitat.

1.2 Personnel

The report was prepared by Guy Morrison, principal arboriculturist and partner of Greengage Arboriculture & Ecology. He is a chartered forester and registered consultant with the Institute of Chartered Foresters. He is also a professional member of the Arboricultural Association and holds the Royal Forestry Society Professional Diploma in Arboriculture.

¹ BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations, British Standards Institute, 2012



2. SITE DESCRIPTION & PROPOSED DEVELOPMENT

2.1 Site Description

The site is located in the Ribble Valley to the north of Sawley village and includes an existing house known as Sawley Lodge (OS grid ref. SD 77920 47086), its gardens and a drive providing access from the village. The site includes an area of woodland to the north-east of Sawley Lodge, a field located to the west of the access drive and a short section of the bank of the River Ribble. The site is shown on the Tree Constraints Plan in Appendix D.

Sawley Lodge is a large disused house with associated outbuildings. The gardens previously contained large mature trees, particularly on a bank to the west and south-west of the house. These trees included ash (*Fraxinus excelsior*), beech (*Fagus sylvatica*), common lime (*Tilia x europaea*), sycamore (*Acer pseudoplatanus*) and pine (*Pinus* sp.) trees which have been recently felled.

The site includes part of Brownthwaite Wood located to the north-east of the lodge. This broadleaved wood is dominated by mature pedunculate oak (*Quercus robur*) with occasional sessile oak (*Quercus petraea*), sycamore and silver birch (*Betula pendula*). The understorey is dominated by dense rhododendron (*Rhododendron ponticum*) with occasional hazel (*Corylus avellana*), hawthorn (*Crataegus monogyna*) and rowan (*Sorbus aucuparia*). An area of the woodland immediately adjacent to the lodge has recently been felled.

A small stream, known as Skinners Sike, cuts through the site. The banks of the stream within the woodland and the steep eastern bank of the stream to the east and south-east of the lodge support wet woodland with mature ash and alder (Alnus glutinosa) dominant. Other species present include holly (Ilex aquifolium), field maple (Acer campestre), hazel, rowan, hawthorn, elder (Sambucus nigra) and semi-mature wych elm (Ulmus glabra). The non-native shrubs rhododendron and snowberry (Symphoricarpos albus) forms a dense understorey in places. Trees and shrubs on the western bank of the stream have recently been felled.

A small orchard has been planted on ground adjacent to a disused tennis court to the east of Skinners Sike. Semi-mature trees present here include apple (*Malus domestica*), plum and damson (*Prunus domestica*), and cherry plum (*Prunus cerasifera*).

Skinners Sike runs to the south of the garden and meets a ditch. Trees present here include mature alder and early-mature silver birch, grey alder (*Alnus incana*), Turkey oak (*Quercus cerris*) and copper beech (*Fagus sylvatica* 'Purpurea'). Several semi-mature Himalayan birch (*Betula utilis*) are also present.

Two mature pedunculate oak trees are located within a field immediately to the east of the access drive with an additional mature oak located on a bank to the



north of the drive. Several short sections of mixed broadleaved hedge run alongside the drive.

To the west of the drive is a grazed field with a long strip of semi-mature woodland planting within a fenced enclosure. Species present include ash, wild cherry (*Prunus avium*), alder, silver birch, grey willow (*Salix cinerea*) and hawthorn. The field contains a single semi-mature horse chestnut (*Aesculus hippocastanum*) planted as parkland tree.

The site includes a short section of the bank of the River Ribble at its southern end close to the village. Scattered trees present here include two dead and dying alder, willow scrub and semi-mature ash and sycamore trees.

Ground investigations were not carried out as part of the survey. Bedrock exposed on the stream showed that the site is underlain by sandstone with some enrichment by calcareous flushes within the wet woodland to the east of Skinners Sike. Soils appeared to be adequately drained over most of the site apart from localised areas of waterlogging associated with the flushes and ground on the Ribble floodplain which would be subject to periodic winter flooding.

There is no public access to most of the site, although a bridleway runs along part of the access drive before passing through a field to the south-east of the site. The larger trees on the site are publically visible with viewing at a distance from the village or from roads and footpaths across the Ribble Valley to the west.

2.2 Proposed Development

It is proposed to demolish the existing Sawley Lodge house and its outbuildings. This would be replaced by a new large country house known as Sawley Hall. The proposed house would cover the existing house footprint, but would extend to the north-east where buildings would be constructed around a large courtyard.

Significant earthworks would be required to accommodate the new house and garden. A bank within the felled area of Brownthwaite wood would be levelled and re-graded to accommodate the courtyard buildings. Material from this bank would be used as fill to level terraces within the existing garden and the existing drive which would be realigned to the west.

A new garden curtilage would be defined to include the existing garden and part of Brownthwaite Wood and woodland along the Skinners Sike. The garden would be enclosed by a 2.0m high security wall. The architect has confirmed that the foundations for the wall will require excavation of a trench 0.6m wide and 0.35m deep.

The existing drive would be realigned to pass in a straight line along an existing bank through the field to the west. The existing drive would be removed and



grassed over, except for a section at its southern end which forms a public bridleway.

A new gatehouse lodge dwelling and entrance gates will be constructed at the southern end of the drive adjacent to the village. A new car-park will also be constructed adjacent to the River Ribble to provide parking for anglers.

Significant tree planting is proposed as part of the landscaping of the proposal. Outline details include a new woodland to be planted in fields to the east of the site, scattered groups of trees on the garden bank to the west of the house and a single row tree avenue planted along the realigned drive. More detailed landscape proposals, including tree species and stock size, will be developed at a later date.

The general layout of the proposal is shown on the Tree Removal Plan (Appendix E). This provides outline details only and reference should be made to the architect's plans for full details on the proposed development.



3. STATUTORY PROTECTION & DESIGNATION

3.1 Tree Preservation Orders / Conservation Areas

Tree Preservation Orders (TPOs) and presence within a Conservation Area provides statutory protection to trees, subject to various exemptions².

The Local Planning Authority (LPA) is Ribble Valley Borough Council. The LPA have been consulted and confirmation is awaited on whether trees on the site are protected by Tree Preservation Order (TPO).

The small part of the surveyed area is located in the Sawley Village Conservation Area³. The Conservation Area includes the small ash and sycamore trees nos. 101 and 102 adjacent to the river, and the copper beech tree no. 98 which is located in a garden adjacent to the existing access road. Within a Conservation Area it is necessary to serve six weeks' notice to the LPA of the intention to fell or prune a tree with a stem diameter exceeding 75mm (at 1.5m), subject to various exemptions. The LPA can create a TPO if it wishes to prevent or control the proposed work. There is an exemption from the requirement to serve notice where tree felling is necessary to implement a scheme that has received full planning permission.

3.2 Felling Licences

Tree felling on non-residential land is controlled by the need to obtain a felling licence from the Forestry Commission before felling more than 5m³ of timber (or 2m³ if the timber is sold) per three month period, subject to various exemptions⁴. There is an exemption from the requirement to seek a felling licence where tree felling is necessary to implement a scheme that has received full planning permission.

A significant amount of tree felling has recently taken place on the site. It is understood that this felling was carried out without a felling licence and discussions are taken place with the Forestry Commission on this matter.

3.3 Protected Species

Trees and scrub provide habitat for a wide range of species, some of which are protected. Most nesting birds and their nests are protected by the Wildlife and Countryside Act 1981 (as amended). All bats and their roosts are protected by the Wildlife and Countryside Act 1981 (as amended) and gain additional protection as under the Conservation (Natural Habitats, &c.) Regulations 1994 (as

² Tree Preservation Orders: a Guide to the Law and Good Practice, Department for Communities and Local Government, 2000

³ www.ribblevalley.gov.uk, accessed 18/09/2013

⁴ Tree Felling ~ Getting Permission, Forestry Commission, 2005



amended). Birds listed under Schedule 1 of the Wildlife and Countryside Act 1981 and all bat species are also protected from disturbance when using nesting or roosting sites.

3.4 Hedgerow Regulations

Hedgerows on agricultural land are protected under the Hedgerow Regulations 1997⁵. Hedgerows should not be removed without serving appropriate notice on the LPA, who can require the retention of hedgerows deemed 'important' under the Regulations. There is an exemption from the requirement to serve notice where hedge removal is necessary to implement a scheme that has received full planning permission.

3.5 Ancient Woodland

Brownthwaites Wood has been identified as ancient semi-natural woodland⁶. Sites are designated as ancient woodland where they are believed to have been continuously wooded since AD1600 and are considered to have very high historical and ecological value.

Part of Brownthwaites Wood has been felled and is proposed for removal as part of the proposed development.

⁵ The Hedgerow Regulations 1997: A Guide to the Law and Good Practise. Department of the Environment, Transport and the Regions, 1997

⁶ www.magic.defra.gov.uk, accessed 18/09/2013



4. METHODOLOGY

4.1 Tree Survey

The site was visited in September 2013 to carry out a survey and assessment in accordance with BS5837:2012.

The following information was collected for each tree: species, age class, height, stem diameter at 1.5m above ground level, crown spread in the four cardinal directions and crown clearance height above the ground. Tree age class categories are listed below:

- Young (Y) <1/3 of life expectancy
- Semi-mature (SM) 1/3 1/2 of life expectancy
- Early-mature (EM) 1/2 1/3 of life expectancy
- Mature (M) >2/3 of life expectancy
- Over-mature (OM) >2/3 of life expectancy, and crown retracting due to age

An assessment was made of the trees' physiological and structural condition, noting any disorders or biomechanical features that present an obvious hazard to present or future users of the site or affect the trees' life expectancy.

Preliminary management works are proposed in order to either remove/reduce hazards or promote good future growth of the tree.

The trees' overall quality and value for retention was assessed in accordance with BS5837:2012 Table 1 (Appendix B). This was dependent on the trees' physiological and structural condition, safe useful life expectancy and arboricultural, landscape, cultural and ecological value. Arboricultural and landscape value takes account of the trees' amenity value, which was determined by tree size, prominence, visibility, appropriateness, attractiveness and screening value.

The root protection area (RPA) radius and area for each tree was calculated in accordance with BS5837:2012. The RPA is an area of ground that provides sufficient soil rooting volume to ensure the survival of the tree. The distribution of the RPA should take account of ground and soil conditions and the likely affect this will have on the distribution of tree roots. Circular RPAs have been drawn for all trees as there are no significant restrictions on root growth.

4.2 Tree Position Plotting

The supplied topographical survey plan dld not show the location of Individual trees within woodland adjacent to Skinners Sike. The position of these trees (nos. 25-65, 77-78 and 80-82) was plotted approximately by eye by the



arboriculturist. It is recommended that the accurate position of these trees is confirmed by topographical survey if necessary.

4.3 Survey Limitations

Trees were assessed visually from ground level. No climbed inspection or detailed investigation of decay was made, although this is recommended where necessary as a further action.

Tree condition can change significantly over a relatively short period of time, and therefore the results and recommendations of this survey can only be held to be valid for a period of 12 months following the survey date. The trees should be reinspected at this time by a competent person.



5. RESULTS AND DISCUSSION

5.1 Survey Results

The survey assessed 102 individual trees, one woodland block, eight groups of trees and three hedge sections. The full survey results are given in the survey schedule in Appendix A.

Three individually surveyed trees have been identified as being of high quality and value (A category). All these are mature or early-mature pedunculate oak (no.s 74, 93 and 94) which are located adjacent to the existing access drive. These trees are likely to make a substantial contribution over a period of at least forty years. T

The area of Brownthwaites Wood (no. W1) which is located within and adjacent to the site was also identified as a group of high quality and value. This ancient semi-natural woodland is of high landscape, historical and ecological value.

Thirty one individually surveyed trees have been assigned to the moderate quality and value category (B category). Trees in this category are likely to make a significant contribution over a period of at least twenty years. These trees include a large number of mature and early-mature ash (nos. 15, 27, 32, 37, 38, 41, 61, 65 and 68) and alder (nos. 11, 12, 14, 24, 29, 35, 42, 43, 44, 56, 58, 82, 83 and 85) trees located in woodland and groups beside the Skinners Sike stream. The other individual trees of moderate value are two copper beech (nos. 21 and 98), silver birch (69 and 71) and field maple (nos. 30 and 87), and a single Turkey oak (no. 17).

Two groups of trees were identified as features of moderate quality and value. These are a small streamside strip of mature alder and other trees to the south of the site (no. G6) and the strip of semi-mature mixed broadleaved planting (no. G7) within the field.

Fifty three trees have been assigned to the low quality and value category (C category). These include younger and smaller trees that are easily replaced those with significant structural defects (which nevertheless have a safe useful life expectancy of more than ten years) and trees of poor form. The majority of the trees in this category are early-mature and semi-mature ash and alder trees. Other species include silver and Himalayan birch, grey alder, wild and Japanese cherry, field maple, holly, rowan, whitebeam, sycamore and horse chestnut.

Six groups of trees and three hedge sections were identified as features of low quality and value. The groups (nos. G1-G5 and G8) are all groups of smaller trees and shrubs or woodland understorey which makes a limited contribution to wider public amenity. The hedges (nos. H1-H3) are all relatively short hedge sections and do not form part of the wider rural field network.



Fifteen trees are of poor quality and value (U category). Trees in this category have a safe useful life expectancy of less than ten years and should be felled irrespective of any development proposal.

The survey identified the stumps of 12 individual trees and four areas containing concentrations of tree stumps. All of these trees have been recently felled.

5.2 Arboricultural Impact

No trees require felling to accommodate the proposed construction works and associated earthworks. All of the trees that may have been affected by these works, such as those on the garden bank to the west of the lodge and in the south-west corner of Brownthwaites Wood, have already been felled prior to the planning application.

Within the proposed garden area it is proposed to fell all trees of low (C category) or poor (U category) quality and value as part of the landscape proposals for the site. All trees of high (A category) or moderate (B category) quality and value will be retained. All trees proposed for felling are shown on the Tree Removal Plan.

It is proposed to remove the strip of woodland planting within the field. This feature of moderate quality and value (B category) will be replaced by a single row avenue of trees which will provide a more formal arboricultural feature on the drive to the house.

Detailed earthworks plans are not available, but it is understood that earthworks will be limited to the area to the west of Skinners Sike stream were trees have already been removed. It is assumed that no earthworks will take place within the RPA of trees to be retained to the east of the stream.

There is potential for the proposed re-grading of land within Brownthwaites Wood to affect retained trees where ground is re-graded within the RPA of these trees. Recommendations are made for precautions to monitor these earthworks within this area to identify where individual trees are affected and may require arboricultural works in mitigation (see sction 6.2).

The proposed site boundary wall has potential to impact on trees to be retained as its foundations will be excavated within the RPA of several trees to be retained (nos. 24, 27, 32, 46, 82, 85 and 87). Excavation to a depth of 0.35m has potential to sever and damage significant roots, although it is likely that roots will be retained at greater depth below this. Severance of large roots close to the trees' stems has potential to destabilise the trees. The impact on the trees could be reduced if appropriate precautions are taken during the excavation and wall construction to identify, protect and retain larger roots within the foundation trenches (see section 6.2).



The proposal to remove and grass over the existing drive has potential to impact on the mature oak trees nos. 93 and 94 where works will take place within their RPA. The impact on the trees could be minimised if appropriate precautions are taken to ensure that roots that may be present beneath and within the base of the road are protected during the works.



6. RECOMMENDATIONS

6.1 Arboricultural Works

The tree survey schedule (Appendix A) contains recommendations for remedial arboricultural works that are necessary to address defects or improve the condition of trees on the site. The schedule also identifies trees or shrubs that require work in order to accommodate the proposed construction works. The trees and shrubs proposed for removal are also shown on the Tree Removal Plan (Appendix E).

All works should be carried out by experienced arboricultural contractors and should comply with BS3998:2010 'Tree Work - Recommendations'.

6.2 Tree Protection

It is recommended that all retained trees on or immediately adjacent to the site should be protected by protective fencing during the site demolition and construction phases. The fencing should comply with BS5837:2012 and should comprise 2.0m tall weldmesh panels fitted to a braced scaffold framework with posts driven into the ground. This construction exclusion zone should protect the RPA and ensure that trees to be retained and their essential rooting zone is not damaged during the works. All potentially damaging operations should be excluded from within the construction exclusion zone, including: excavation, changes to levels, temporary access, vehicle parking or movements, fires and the storage, disposal or mixing of materials and chemicals.

It is recommended that an arboricultural method statement is produced with detailed procedures for the protection of trees during the proposed construction works, particularly where works are proposed close to and within the RPA of trees to be retained. The method statement should include the following:

- A tree protection plan showing the location and detailing of the protective fencing.
- Procedures to be adopted during the proposed re-grading works within Brownthwaites Wood. Procedures to include monitoring by an arboriculturist during the works and precautions to be adopted where roots are severed during the works.
- Procedures for the construction of the proposed boundary wall within the RPA of trees to be retained. Precautions to include hand-digging of the trench, monitoring by an arboriculturist, protection of roots and precautions to be adopted where roots are severed during the works. Engineering details to be prepared separately to foundations to be constructed around larger roots to be retained.

⁷ BS 3998:2010 Tree Work – Recommendations, British Standards Institute, 2010



 Procedures for the removal of the existing driveway within the RPA of the oak trees nos. 93 and 94. Precautions to include monitoring by an arboriculturist and precautions to be adopted where roots are uncovered during the works.

6.3 Ash Dieback Disease

Ash dieback disease (Chalara fraxinea)⁸ has recently been discovered in the UK and is likely to become established in the Clitheroe area within the next few years. The disease has the potential to damage and kill large numbers of ash trees, although the exact impact of the disease in the UK cannot yet be accurately predicted. For this reason, the impact of the disease has not been taken into account when estimating the life expectancy of ash trees on the site, although this may be severely shortened by infection.

6.4 Protected Species

Trees and shrubs on the site may be used for nesting by birds during the spring and summer. Advice should be sought from an ecologist if it is proposed to fell trees in the standard nesting season from March to August.

Some of the trees proposed for felling are large trees containing features that are commonly associated with bat roosting, such as cracks, cavities, loose bark and dense ivy cover. It is recommended that these trees are assessed before felling by an ecologist who will advise on requirements for additional survey and precautions that may be required to avoid impacting on bats.

6.5 Further Inspection

It is recommended that all the trees on the site are re-inspected following the completion of proposed development to identify any trees that may have been affected by the works.

Following the completion of the works it is recommended that the tree are reinspected annually by a competent person who has received training in basic tree inspection. In addition to this it is recommended that all trees are inspected every five years (or more regularly where advised) by a suitably qualified and experienced arboriculturist.

⁸ www.forestry.gov.uk/chalara



APPENDIX A - TREE SURVEY SCHEDULE



APPENDIX A – TREE SURVEY SCHEDULE

height (m) 7.5 2 11.5 2.5 12.5 2.5 12.5 2.5 12.5 1.5 12.5 1.5 12.5 1.5 11.5 1.5 11.5 1.5	ė	2000 0000 0000 0000	Age		(m) dear-		Mln. branch	D E	mch sp	Branch spread (m)		Condition	Comments	Works Recommendations	Rema- ining	Categ- ory	RPA radius	RPA
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Field Maple EM 127+20 7.5 2 - 4.5 4.5 3 3 9 Dow crown density and fall tree due to poor Condition Cond	Indi	vidual Trees																
Ash EM 59 11.5 2.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 4.5 6.5 P Low crown deback. Tree in decition. condition. condition. Up of the due to poor condition. 4.0 7.08 Alder EM 35+25 12.5 2.5 - 1.5 4 <td< td=""><td></td><td>Field Maple</td><td>Æ</td><td>27+20</td><td>7.5</td><td>2</td><td>ı</td><td></td><td></td><td></td><td></td><td></td><td>Low crown density and vigour. Significant crown dieback. Tree in decline.</td><td>Fell tree due to poor condition.</td><td><10</td><td>Э</td><td>4.57</td><td>99</td></td<>		Field Maple	Æ	27+20	7.5	2	ı						Low crown density and vigour. Significant crown dieback. Tree in decline.	Fell tree due to poor condition.	<10	Э	4.57	99
Hawthorn EM 17 6 1 - 3 0 1 P Developed from failen condition. Fill tree due to poor condition. <10 0 2.04 Alder EM 35+25 12.5 2.5 - 1.5 4		Ash	Σ	59	11.5	2.5		3.5		4.5 4	<u> </u>	<u> </u>	Low crown density and vigour. Significant crown dieback. Tree in decline.		<10	э	7.08	157
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Alder EM 30+18 12.5 1.5 - 3 4.5 4.5 6 G Twin-stemmed. - 20-40 C2 4.20 Grey Alder EM 32 11.5 1.5 - 2.5 2 3 2.5 6 - - 20-40 C2 3.84 Silver Blrch EM 26 12 3 - 2.5 2 3 2.5 6 - - 20-40 C2 3.84 Rowan SM 10 7 1.5 - 2.5 2 3 2.5 6 G - - 20-40 C2 3.12 7 1.20 0 - 1.20 - 1.20 0 - 1.20 0 - 1.20 0 0 - 1.20 0 - 1.20 0 0 - 1.20 0 - 1.20 0 0 - 1.20		Alder		35+25	12.5	2.5		1.5	4		<u> </u>	-	Dead tree.	Fell tree due to poor condition.	0	ח	5.16	84
Grey Alder EM 32 11.5 1.5 - 4 4 4 4 6 - - 20-40 C2 3.84 Silver Blrch EM 26 12 3 - 2.5 2 3 2.5 6 G - - 20-40 C2 3.12 Rowan SM 10 7 1.5		Alder	Ξ	30+18	12.5	1.5		က	ω,			\vdash	Twin-stemmed.		20-40	2	4.20	55
Silver Birch EM 26 12 3 - 2.5 2 3 2.5 2 3 2.5 2 3 2.5 2 3 2.5 2 3 2.5 3 2.5 3 2.5 3 2.5 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3		Grey Alder	Ē	32	11.5	1.5		4	4		-	-	1		20-40	2	3.84	46
Rowan SM 10 7 1.5 - 1.5	-	Silver Birch	Æ	56	12	۳		2.5	2			+		.1	20-40	S	3.12	31
Grey Alder EM 28 11 2 - 2.5 3.5 3.5 7.5 F F Large bark wound at - 10-20 C2 3.36 stem base.		Rowan	SM	10	_	1.5		1.5	1.5				Severe bark damage on lower stem.	Fell tree due to poor condition.	<10	D	1.20	2
		Grey Alder	Σ	28	11	7			LC CZ				Large bark wound at stem base.		10-20	ខ	3.36	35



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RPA area		10	93	171	32	134	46	7	127	13	e	e	72	e .
RPA radius		1.80	5.45	7.38	3.36	6.54	3.84	1.44	6.36	2.04	96'0	0.96	4.80	96.0
Categ- ory		C5	B2	B2	C2	B2	B2	CZ	B2	CZ	2	n	B2	2
Rema- ining	bution (yrs)	10-20	20-40	20-40	20-40	20-40	40	×40	>40	20-40	10-20	<10	>40	10-20
Works Recommendations	The Date of		•	1.	1	1		1				Fell tree due to poor condition.		
Comments		Low crown density and vigour.	Twin stemmed.	Multi stemmed.		Twin stemmed.		Stem bark damage.	1		Suppressed tree of poor form.	Suppressed tree of poor form. Significant bark wound.		Suppressed tree of poor form.
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Condition	Phys- lolog- ical	۵	ပ	ڻ ق	U	ပ	ш	<u> </u>	ŋ	L	ш	۵	១	L.
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E E	Z	+-1	m	ro.	2	4.5	72	m	m	0	0	0	2.5	0
Min. branch	& direction (m)			,	-		'			,	,	1	ı	1.
	ance height height & direc- (m) tion (m)	9	2	2	2	2	2	1.5	2	9	1.5	1.5	1.5	2
Height Crown (m) clear-		11	14	16	14	16	16	6	16	16	45	4	15.5	4.5
	eter (cm)	15	35+29	40+33	28	40+37	32	12	23	17	ω	∞	40	ω
Age		E	E	Ē	EM	E	EM	SM	Ē	EM	SM	SM	EM	SM
Species		Silver Birch	Alder	Alder	Alder	Alder	Ash	Ash	Turkey Oak	Silver Birch	Himalayan Birch	Himalayan Birch	Copper Beech	22 Himalayan Birch
Š		2	11	12	13	14	15	16	17	18	19	2	21	22

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RPA	E)	127	312	33	62	290	78	126	65	277
RPA	Ē	6.36	96.6	3.24	4.44	9.60	3.00	6.34	4.56	9.39
Categ- ory		13	18	8	8	B2	ß	82	B2	8
	contri- bution (yrs)	10-20	20-40	20-40	240	20-40	20-40	×40	20-40	20-40
Works Recommendations		Fell tree of low value to implement landscape scheme.		Fell tree of low value to implement landscape scheme.	Fell tree of low value to implement landscape scheme.	Remove ivy to allow future tree inspection.	Fell tree of low value to implement landscape scheme.	Remove smaller rubbing stem.	8	Fell tree of low value to implement landscape scheme.
Comments		Stem cavity at base on south side. Stem not at immediate risk of failure but will become so in the future as decay develops.		Branches broken by recent felling.		Small bark wound at stem base. Stem ivy cover.	Twin-stemmed tree. Several small holly stems located nearby.	Twin-stemmed.		Twin-stemmed. Dense rhododendron prevented inspection.
itlon	Stru- ctural	۵	U	т	L.	L	()	L	D.	#4
Condition	Phys- iolog- ical		ဖ	ш	o o	i <u>r</u>	O	U	U	U
anch spread (m)	S S	о о	7 6.5 5.5	en en	e 0 e	12 7 9	3 2	ω ω	6 4 4	5 4 1.5
Bra	z	4	5,5	0	9	ω	7	2.5	m	4
Min. branch	& direction (m)			1		,	-			
(m) dear-		7	1.5	2.5	12	12	1.5	01	2.5	2.5
Height (m)		20.5	17.5	7.5	21.5	21.5	7.5	21.5	13	15
diam-	(cm)	53	83	27	37	08	20+15	46+26	38	70+35
Age	9	EM	Σ	Ē	Ē	E	Σ	EΜ	E	Σ
Species		Ash	Alder	Field Maple	Ash	Ash	Holly	Alder	Field Maple	Alder
ġ		23	24	25	26	27	28	29	30	31



Species Age Species Height Covering Coverin										
Species Age Stein Height Crown Win. Branch spread Condition Comments Recommendations Ining or virtual Comments Condition Comments Condition Comments Condition Comments Condition Condit	RPA area (m²)		391	59	43	84	38	319	147	96
Species Age Stem Height Crown Fight Recommendation Commendation	RPA radius		11.16	4.32	3.72	5.16	3.48	10.08	6.84	5.52
Species Age Stem Height Crown Fight Recommendation Commendation	Categ- ory		B2	ß	2	B2	Э	82	B2	2
Species Age Stein Height Crown Min. Branch spread Condition Comments Recommendations Recommendations	_	bution (yrs)	20-40	20-40	>40	20-40	<10	20-40	>40	10-20
Species Age offered lass diamonal condition Age offered lass diamonal condition Condition of care condition Min. Branch spread condition Condition condition Ash M 93 22.5 4 - 12 10 8 5 F F Alder M 93 22.5 4 - 12 10 8 5 F F Alder M 93 17 6 BS 3 2 3 6 F F Ader M 43 19 1.5 - 5 5 2.5 2.5 6 F Ash M 84 23 4 - 9 7.5 6 F P Ash EM 57 20 7 2-Min 2 5 5 7 8 F				Fell tree of low value to implement landscape scheme.	Fell tree of low value to implement landscape scheme.	1	Fell tree due to poor condition.	Remove branch with decay at base at 7m. Carry out aerial inspection of cavity.		
Species Age class diamered class diamered control Height crown from the class diamered class diamer	Comments		Previous loss of small branches. Dense rhododendron prevented full inspection.		Suppressed tree of poor form.	ı	Significant stem bark wound.	Previous loss of large branches in crown. Cavity at base of branch on north side at 7m. Full extent of decay cannot be determined.	1	Small cavity opening in stem at 4m. Extent of cavity cannot be determined.
Species Age Stem Height Crown Min. Branch spread Class Class	tion	Stru- ctural	# #	U .	īr.	ŋ	IL.	C	L.	۵.
Species Age diamorete diamorete Stem diamorete Height (m) clear height (m) Min. Branch spreamorete Branch spreamorete (m) Ash M 93 22.5 4 - 12 10 8 8 Aider EM 36 17 6 BS 3 3 2 - 12 10 8 8 Aider M 43 19 1.5 5 5 2.5 8 - Rowan M 29 7.5 1.5 35 3.5 4 - 35 3.5 4 Ash M 84 23 4 - 9 7.5 5 Ash EM 57 20 7 2-Min 2 7 7.5 Ash EM 46 19 3 3 2 7	Cond		ш	9	_O	ŋ	۵.	LL .	g	ட
Species Age class diamedrate Stem class diamedrate Height Crown class diamedrate Min. Branch leight of the leight class direction class direction class diamedrate Min. Class diamedrate Min. Class diamedrate Name leight leigh	read				1					4
Species Age class diamedrate Stem class diamedrate Height Crown class diamedrate Min. Branch leight of the leight class direction class direction class diamedrate Min. Class diamedrate Min. Class diamedrate Name leight leigh	(m)						1	1		~
Species Age eter class Stem class diamentum Height (m) clear ance eter (cm) Ash M 93 22.5 4 Adder M 93 22.5 4 Adder M 43 19 1.5 Rowan M 43 19 1.5 Ash M 84 23 4 Ash EM 57 20 7 Ash EM 46 19 3	Brand		!							
Species Age eter class Stem class diamentum Height (m) clear ance eter (cm) Ash M 93 22.5 4 Adder M 93 22.5 4 Adder M 43 19 1.5 Rowan M 43 19 1.5 Ash M 84 23 4 Ash EM 57 20 7 Ash EM 46 19 3	Min. branch	k direction (m)		BS	ı	1	1	1	2-Min	1
Species Age Stem class diameter class diameter class diameter cm charter cm Ash M 93 Adder M 43 Rowan M 29 Ash M 84 Ash EM 57 Ash EM 57 Ash EM 46	Crown clear-	height (m)	4	9	1.5	1.5	1.5	4	7	സ
Alder Ash M Ash Ash EM	Height (m)		22.5	17	ω	19	7.5	23	20	19
Ash Ash Alder Rowan Ash Ash Ash Ash Ash Ash	Stem diam-	cm)	93	36	31	43	59	48	22	46
	Age		Σ	Σ	SM	Σ	Σ	Σ	EM	E
33 38 33 33 33 33 33 33 33 33 33	Species		Ash	Alder	Pedunculate Oak	Alder	Rowan	Ash	Ash	
	N		32	33	34	35	36	37	38	39

RPA	(m)	123	185	88	142	137	34	290	52	168	147
6	Ē	6.26	7.68	5.28	6.72	09.9	3.31	9.60	4.08	7.32	6.84
Categ-		8	B2	B2	B2	B2	g	B2	2) >	>
	contri- bution (yrs)	20-40	20-40	20-40	20-40	20-40	×40	20-40	>40	<10	<10
Works Recommendations		Fell tree of low value to implement landscape scheme.					Fell tree of low value to implement landscape scheme.		Fell tree of low value to implement landscape scheme.	Fell tree due to poor condition.	Fell tree due to poor condition.
Comments		Multi-stemmed tree.	Previous loss of small branches.	Basal shoots present.	Basal shoots present.	Dense rhododendron prevents inspection.	Twin-stemmed tree on steep bank.	Dieback of some smaller branch ends. Swollen stem base.	Suppressed tree.	Long crack on upper stem. Crack open and stem at risk of snapping.	Large cavity and significant decay at stem base.
ition	Stru- ctural	₀	ш	U	U	#5	ш	ш	ш	۵	۵.
Condition	Phys- lolog- ical	U	L.	U	U	U	ڻ ن	L.	ш	u.	ш
ead	3	rv.	4	4	9	9	7.4	m	7	^	H
ch spread (m)	w	4	9	5 4	m	5 4	m,	10	4	4	φ
Branc	Z	4	4.5 7	4 2.	2 1	1.5 2.	4.5 2	8	7	4	7.5
Min. branch		,	4	BS	BS		4	5-Min	4	φ '	1
Crown clear-		2	4	4	ထ	7	7	01	2	21	1.5
Height (m)		11	19	21	21.5	18	13.5	25	14	24	14
Stem diam-	(cm)	12-21 x10	2	44	26	22#	20+19	80	34	61	22
Age		Σ	Σ	Σ	Σ	Σ	MS	Σ	EΜ	Σ	Σ
Species		Field Maple	Ash	Alder	Alder	Alder	Ash	Ash	Ash	Ash	Alder
No.		40	41	42	43	44	45		47		



area (m²)		- 29	43	28	31	95	88	197	35	157
radius a		4.32	3.72	3.00	3.12	44.44	5.30	7.92	3,35	7.08
_			E.				-			\vdash
ory		S	⊃ 	8	2	8	S	B2	2	B2
ining	bution (yrs)	20-40	V10	240	20-40	20-40	20-40	20-40	20-40	20-40
works Recommendations		Fell tree of low value to implement landscape scheme.	Fell tree due to poor condition.	Fell tree of low value to implement landscape scheme.	Fell tree of low value to implement landscape scheme.	Fell tree of low value to implement landscape scheme.	Fell tree of low value to implement landscape scheme.	1	Fell tree of low value to implement landscape scheme.	
Comments	ų.		Significant dieback in upper crown.				Twin-stemmed.	Basal shoots present.	Multi-stemmed.	
Tion Tion	Stru- ctural	₀	۵	U	L.	L.	U	ш	ш	U
Condition	Phys- iolog- ical	U	۵	₉	ш	U	ŋ	ß	₀	9
B	3	2.5	т	т	2	2.5	4.5	т	4	3.5
nch spread (m)	w :	m	-	7	1.5	9	3.5	4.5	4	2
(m)	ш	4	-	7	m	2.5	3.5	5.5	4	5
<u> </u>	z	2.5		3.5	3.5	0	3.5	4	4	2
Min. branch	k direction (m)	BS	BS	BS			1	BS	1	
Crown clear-	height & direc- (m) tion (m)	4	m	2	m	2	स्त	2	2	2.5
Height Crown (m) clear-		16	13	6	14	14	14	16	æ	18
	(cm)	36	31	25	56	37	35+27	99	21+14	59
Age		Ā	E E	Ē	£	Ξ	Σ	Σ	EM	Σ
Species		Alder	Ash	Alder	Alder	Alder	Alder	Alder	Alder	Alder
è		20	51	25	53	42	55	56	57	58

RPA	(m ₂)	461	10	400	31	22	174	18
RPA radius	Œ	12.12	1.80	11.28	3.12	2.64	7.44	2.40
Categ- ory		Э	8	B2	8	ន)	B2
Rema-	contri- bution (yrs)	¢10	>40	20-40	>40	×40	<10	>40
Works Recommendations		Fell tree due to poor condition. Fell tree as soon as possible.	Fell tree of low value to implement landscape scheme,		Fell tree of low value to implement landscape scheme.	Feli tree of low value to implement landscape scheme.	Fell tree due to poor condition.	
Comments		Large cavity at base. Cavity open to north, east and west. Tree at high risk of collapse.	Dense rhododendron prevented inspection.	Previous loss of large branch. Dense rhododendron prevented full inspection.			Stem leans east. Low crown vigour and density. Crown dleback. Tree in decline.	Dense rhododendron prevented inspection.
Ition	Stru- ctural	څ	# 5	# L	U	ט	<u>a</u>	#5
Condition	Phys- lolog- ical	L	U	L.	o ·	U	۵	₀
pe	>	7	m	φ	5.5	4	0	4
nch spread (m)	w	ω	m	ro.	4	m	9	4
anch (r	w	_	m	ro L	4	H	٥	7
Bran	z	3.5	7	9	5.5	7	7	m
Min. branch	& direction (m)		-	1			,	1
clear-	height (m)	m	<u>د</u>	m	7	7	ro.	2
(m) clear-		19	10	23	10	თ	18	12
diam-	(CIII)	101	15	46	26	22	62	50 #
Age		Σ	SM	Σ	S	SM	Σ	SM
Species		Ash	Alder	Ash	Alder	Ash	Ash	Ash
Ċ							2	65 /
								_

Greengage



RPA	area (m²)		49	31	52	185	202	142	109	145
RPA	radius (m)		3,96	3.12	4.08	7.68	8.03	6.72	5.88	6.79
Categ-	OLY		ប	8	B2	B2	2	B2	CS	2
Rema- Categ-	ining contri-	bution (yrs)	10-20	10-20	>40	20-40	10-20	20-40	10-20	10-20
Works	Recommendations		Fell tree of low value to implement landscape scheme.	Fell tree of low value to implement landscape scheme.	ě	ı	Fell tree of low value to implement landscape scheme.		Fell tree of low value to implement landscape scheme.	Fell tree of low value to implement landscape scheme.
Comments			Relatively low crown density.				Multi stemmed at 1.2m. Low crown density and vigour. Dieback at branch ends.			Twin stemmed. Dieback in upper crown.
tion		Stru- ctural	<u> </u>	L.	U		ш	ш	ш	<u>.</u>
Condition	Ę	Phys- Stru- iolog- ctural ical	U	ட	b	U	<u> </u>	U	L	<u>-</u>
ped		≥	н	4	m	4	т	2	4	5.5
Branch spread	5	v,	-	m	72	4	∞	2.5	5.5	φ
hou	E	m	7.5	4.5	4	_	9	9	5.5	٥
B		Z	z:	7. 7.	m	r.	0	3.5	-	5.5
Min	branch	k direction (m)				-			1.5- Min	BS
Crown		height & direc- (m) tion (m)	1.5	3.5	2.5	m	m	2.5	2.5	3.5
Height Crown	Œ	, sa	9.5	12	13	20	17	70	. 15	13
Stom		(cm)	33	26	34	64	45+35 +35	- 26	49	41+39
Ago	class		Ψ	EΜ	SM	Σ	Σ	Σ	Σ	E
	9		3 Japanese Cherry	7 Wild Cherry	3 Ash	9 Silver Birch	Silver Birch	1 Silver Birch	2 Silver Birch	3 Alder
2	Ė		99		89	69	2	71	22	73

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RPA	E)	342	22	22	16	6	6	59
RPA	Œ	10.44	2.64	2.64	2.28	1.68	1.68	4.32
Categ- ory		A1	IJ,	ū	g	23	ជ	8
Rema- ining	contri- bution (yrs)	>40	>40	>40	>40	×40	10-20	20-40
Works Recommendations		Cut branch at 1.5m along decayed branch stub. Retain stub as habitat feature.	Fell tree of low value to implement landscape scheme.					
Comments		Decayed branch stub at 2m. Decay extends into stem. Stem not at risk of failure but decay should be monitored.					Bark wounding on stem.	
ition	Stru- ctural	L.	U	U	U	ט	ш	ш
Condition	Phys- lolog- ical	5	₀	U	_o	ט	۵	o o
pee	≥	_	m	2.5	2	7	2.5	10
nch spread (m)	w	_	H	3 2.5 2.5	2.5 2.5	2	m	0.5
anch	ш	00	2.5	m	2.5	2.5	7	9
Bra	Z	φ	m	7	m	-	1.5	4
Min. branch	& direction (m)	ı		1		1	i	
Crown clear-	(m)	1.5	7	7	2.5	2.5	2	3.5
Height (m)		15	7	7	ω	9	5.5	16
diam-	(E)	87	22		19	14	14	36
Age		Æ	SM	MS	SM	ΣS	Ξ	Σ
Species		Pedunculate Oak	Field Maple	Field Maple	Wild Cherry	Wild Cherry	Apple	Alder
ė	THE STATE OF	74	75	76	77	78		08
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ga	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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area (m²)		46	180	160	215	142	88	113	100
radius (m)		3.84	7.56	7.14	8.28	6.72	5.28	9.00	5.64
ory		22	B2	B2	8	82	n	B2	77
ining	bution (yrs)	20-40	20-40	20-40	V 40	20-40	<10	20-40	>40
works Recommendations		Fell tree of low value to implement landscape scheme.	-		Fell tree of low value to implement landscape scheme.		Fell tree due to poor condition.		Fell tree of low value to implement landscape scheme.
Comments				Twin stemmed.	Evidence of previous crack on stem, now occluded. Crack extends onto large branch to north at main fork. Crack on branch is open, and branch at risk of failure.		Crown dead and upper stem dead. Woodpecker holes evident. Small live branch at 2m. Tree in decline.		Multi-stemmed tree within hedge.
Ē	Stru- ctural	U	G	ш	ш .	Ŀ	d>	ŋ	Ľ.
Condition	Phys- iolog- ical	U	Ö	G	ш.	U	\$	ŋ	U
<u> </u>	3	ø	3.5	4	ru .	4 5	0	4	ι,
Branch spread (m)	w		9	9	5.5	5	7	ы	-
(m)	ш	-	4	4	7. 7.	4	7	4	2
8	z	m	2	9	o	4.5	0	2	m
Min. branch	height & direction (m)	,	, 1	'	1	1		BS	BS
	ance height (m)	1.5	2.5	2.5	1.5	5	1.5	6	1.5
Height (m)		ω	19	15	19	17	12.5	13	14
	eter (cm)	32	63	44+40	69	56	44	20	32+31 +15
Age		Σ	Σ	Æ	Σ	Σ	Σ	Σ	SM
Species	e që	Hawthorn	Alder	Alder	Ash	Alder	Alder	Field Maple	Common Lime
		120	82	83	88	85	86	87	88

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r	arbo
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RPA	Ê	88	26	31	m	434	304	12	15
RPA	Ē	5.30	2.88	3.12	96'0	11.76	9.84	1.92	2.16
Categ- ory		2	2	S	IJ	A1	A1	IJ	ū
Rema- Ining	contri- bution (yrs)	×40	20-40	10-20	>40	v 40	04^	20-40	20-40
Works Recommendations		Fell tree of low value to implement landscape scheme.	Fell tree of low value to implement landscape scheme.	Fell tree of low value to implement landscape scheme.	Fell tree of low value to implement landscape scheme.		Remove barbed wire fence attached to stem.	Fell tree of low value to implement landscape scheme,	Fell tree of low value to implement landscape scheme.
Comments		Multi-stemmed tree within hedge.	Tree within hedge line.	Tree within hedge line. Slightly low crown density and vigour.	Tree in fenced enclosure. Leaning stem.	Minor deadwood in crown.	Minor deadwood in crown		
tlon	Stru- ctural	ш	ш.	ш	ΙΈ	L.	ш	₀	ט
Condition	Phys- iolog- ical	U	o o	ш	L.	ဖ	₀	IL.	U
Branch spread (m)	x	4 4.5	2.5 1.5	2 2	0.5 0	5 4 10.	5 7.5 5.5	2 2	m
Brand	Z	2	1 2	2 2	2	8 7.	4 5	2 2	2.5 3
branch	tion (m)	BS	BS		1	1	ı	1	
		2	1,5	2.5	1.5	1.5	1.5	7	1.5
(m) clear-		13	_	7	4	17	17	7.5	6 0
diam-	(EE)	20+20 +23+2 5	24 .	26	8	86	83	16	891
class		SM	EΜ	Ē	MS	Σ	Ψ	SM	SM
		Common Lime	Holly	Holly	Rowan	Pedunculate Oak	Pedunculate Oak	Whitebeam	Himalayan Birch
	411	68				93	94		2



Horse Chestnut SM	(cm)		clear- b	branch		(m)					Recommendations	ining contri-	ory	radius (m)	area (m²)
-			height & direction (m) (m)	tion (m)	Z	S	>	Phys- iolog- ical	Stru- ctural			bution (yrs)			
	41	11.5	2	1	6.5 7	9	r.	۵	ட	Tree in fenced enclosure. Low crown vigour. Dead bark strip on stem. Evidence of bleeding canker infection.	Fell tree of low value to implement landscape scheme.	10-20	IJ	4.92	76
Copper Beech SM	35#	9.5	2	1	5.5 5.5	5 5.5	5.5	r.	g	Off-site tree located in garden. Tree located in conservation area.		×40	B1	4.20	55
Σ	20-25 x6	7.5	2		3.5 2		2	۵	\$	Dead tree on river bank.	Fell tree due to poor condition.	0	n	6.61	137
Σ	20-25 x8	10	2		5	7.0	m	dV	۸	Dying tree on river bank.	Fell tree due to poor condition.	<10 <10	n	7.64	183
101 Sycamore Y	ø.	v	1.5		1.5 1.5	5 1.5	1.5	o .	U	Tree on river bank. Tree located in conservation area.	Fell tree of low value to implement landscape scheme.	>40	ប	96'0	e e
ΣS	21	ø.	1.5		3.5 3	m m	က	U	iL.	Tree on river bank. Previously topped at 2m. Tree located in conservation area.	Fell tree of low value to implement landscape scheme.	>40	17	2.52	20

90	RPA	(m ₂)	S
Greengage	RPA	Ê	S
Ser.	Categ- ory		A2
Ü	Rema-	contri- bution (yrs)	>40
	Works Recommendations		Proposals for woodland management considered elsewhere. Fell sessile oak with weak fork.
	Comments		Brownthwaites Wood. Designated ancient semi-natural woodland. Stand dominated by mature oak (predominately pedunculate with occasional sessile oak) with occasional mature sycamore or birch. Alder and occasional ash present along skinners Sike stream and damp ground. Understorey of dense rhododendron and occasional rowan, hazel and hawthorn. Woodland would benefit from removal of invasive rhododendron. Area of woodland adjacent to Sawley Lodge (GSt1) recently felled. Mature sessile oak adjacent to felled area has very weak main fork with included bark and associated crack in stem.
	Condition	Stru- ctural	9/5
	Cond	Phys- lolog- ical	G/F
	Branch spread (m)	R N	8-4
	Min. branch	k direction (m)	1
	_	height (m)	>1.5
	Height (m)		18-22
	Stem diam-	(()	45-90
	Age		Σ
	Species		Pedunculate Oak*, Rhododendron*, Alder, Sessile Oak, Sycamore, Ash, Hawthorn, Hazel, Rowan, Silver Birch
	á		

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Sawley Hall, Sawley, Clitheroe Arboricultural Report



		<u> </u>		
RPA area (m²)		8	SO	S
RPA radius		S	S	S
Categ- ory		72	8	2
Rema- Categ- ining ory	bution (yrs)	20-40	20-40	>40
Works Recommendations		Remove trees and shrubs of low value to implement landscape scheme.	Remove trees and shrubs of low value to implement landscape scheme.	Remove trees and shrubs of low value to implement landscape scheme.
Comments		Understorey within woodland on steep bank to east of Skinners Sike stream. Understorey dominated by rhododendron at northern and southern end of wood. Wood would benefit from removal of invasive rhododendron and snowberry.	Understorey and shrubs on steep bank to east of Skinners Sike stream. Dominated by rhododendron. Site would benefit from removal of invasive rhododendron.	Orchard trees within fenced enclosures and scattered rhododendron shrubs.
Ition	Stru- ctural	U	O	L
Condition	Phys- iolog- ical	ပ	O	ii.
Branch spread (m)	N N	1-3	1-3	1-2
Min. branch	& direction (m)		1	ı
Crown clear-	ance height (m)	0 ^	0.4	
Height (m)		1-5	2-5	3-4
Stem diam-	(cm)	MS MS	×15 MS	< <u>\$</u>
Age		ЕМ/М	EM/M	S
Species		Rhododendron*, Hazel, Hawthorn, Wych Elm, Elder, Holly, Snowberry	Rhododendron*, Hazel, Ash, Holly	Apple, Plum, Cherry Plum, Rhododendron
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RPA	(m ₂)	S	S	S	ಬ	S	ន
RPA radius	Ē	S	ន	SO	S	S	S
Categ- ory		2	2	B2	B2	2	8
Rema- ining	contri- bution (yrs)	>40	20-40	20-40	20-40	20-40	>40
Works Recommendations		Remove trees and shrubs of low value to implement landscape scheme.	Remove shrubs of low value to implement landscape scheme.	Remove and control rhododendron.	Remove trees and shrubs of moderate value to implement landscape scheme.	Remove trees of low value adjacent to proposed car-park.	Remove hedge section of low value to implement landscape scheme.
Comments		Line of multi-stemmed young alder trees.	Rhododendron on bank. Site would benefit from the removal of Invasive rhododendron.	Group of trees on eastern bank of small stream beyond the site boundary. Site would benefit from removal of invasive	Strip of mixed broadleaved tree planting in field,	Small group of trees on river bank.	Hedge running above small retaining wall. Hedge previously laid.
tion	Stru- ctural	O	ט	6/F	0	o, o	0
Condition	Phys- iolog- ical	U	U	U	တ	U	U
Branch spread (m)	» «	≥1,5	1-3	2-6	2-4	2-4	<1.5
Min. branch	& direction (m)			ı		1	
Crown clear-		N N	O.	02	^2	0	0
Height (m)		m.	2-4	12-18	8-13	4	3.5
Stem diam-	(E)	SS MS	Ą	20-60	10-20	5-10 MS	A
Age		>	Σ	EM/M	Σ	Ξ.	A S
Species		Alder	Rhododendron	Alder*, Hawthorn, Rhododendron, Elder, Blackthorn	Ash, Silver Birch, Grey Willow, Fleld Maple, Alder, Wych Elm, Elder	Goat Willow	Hazel, Elder, Hawthorn, Dog Rose
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RPA area (m²)	Ш	S	ន					-							
	_														
RPA radius (m)		S	S			_									
Categ- ory		S	2												
Rema- ining	bution (yrs)	>40	>40												
Works Recommendations		Remove hedge section of low value to implement landscape scheme.	Remove hedge section of low value to implement landscape scheme.		·		10								
Comments		Short hedge section. Hedge previously laid.	Short hedge section.		Stump of felled tree.										
tion	Stru- ctural	U	O								:				
Condition	Phys- iolog- Ical	U	U					()	3						
Branch spread (m)	х «	≥2	1-1.5					i)							
Min. branch	k direction (m)									1					
$\overline{}$	ance neight height & direc (m) tion (m) (m)	0	0						el .	I I					
Height (m)		5-6	4-6						6	Į.					
	(cm)	<10 MS	NA		110	20	120	140	145	120	25	90	25	35	02
Age	1	₹.	NA					36		E.					
Species		Hazel*, Common Lime, Elder, Holly	Field Maple*, Holly, Elder	Tree Stumps	Sycamore	Ash	Common Lime	Common Lime	Beech	Common Lime	Wild cherry	Alder	Himalayan birch	Pine sp.	Oak sp.
S	HE	H2	H3	Tree	St1	St2	St3	St4	StS	St6	St7	St8	St9	St1	St1



Š	Species	Age	Stem	Stem Height Crown Min.	Crown	Min.	Branc	Branch spread	_	Condition	Commente	Works	Dome		466	
		class	dlam-	(m)	dear	dear- branch		(E)				Recommendations		Categ- ory	RPA radius	RPA
		±	(cm)		m) (m)	height & direction (m) (m)	ш 2	Ø	W Phys iolog ical	Phys- Stru- iolog- ctural ical			contri- bution (yrs)		Œ.	(m²)
St1 2	Oak sp.		30								Stump of felled tree.					
GSt 1	GSt Oak*, Rowan, 1 Birch, Hawthorn, Beech		30-120								Stumps of felled trees in Brownthwaites Wood.					
GSt 2	GSt Ash, Pine, Beech, 2 Holly, Yew		25-120						-		Stumps of 8 felled trees.					
GSI 3	GSt Ash, Pine, Lime, 3 Beech, Sycamore, Coast Redwood		25-110						<u> </u>	_	Stumps of 18 felled trees.					
GSt 4	GSt Ash, Beech, Fleld 4 Maple, Alder, Hazel, Holly, Hawthorn		10-60								Stumps of felled trees on the western bank of Skinners Sike stream.					

General: * - Dominant species NA - Not applicable MS - Multi-stemmed Epi - Epicormic branch Min - Minor branch CS - Crown-spread RPA - Root protection area Age class: Y - Young SM - Semi-mature EM - Early-mature M - Mature OM - Over-mature Condition: G - Food F - Fair P - Poor VP - Very poor D - Dead Direction: A - North E - East S - South W - West Quality and value category: A - High B - Moderate C - Low U - Poor/fell



APPENDIX B - TREE QUALITY AND VALUE CATEGORIES



APPENDIX B - TREE QUALITY & VALUE CATEGORIES

(from BS5837:2012, Table 1 - 'Cascade chart for tree quality assessment')

Category and definition	Criteria (including subcategories where appropriate)			Plan colour
TREES UNSUITABLE FOR RETENTION				COIDEI
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	Trees that have a 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, and 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 NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve			Dark red
TREES TO BE CONSIDERED FOR RETENTION				
	1. Mainly arboricultural values	2. Mainly landscape values	3. Mainly cultural values, including conservation	
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	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)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	Light green
quality with an estimated remaining life expectancy of at least 20 years	presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for	usually growing as groups or woodlands, such that they attract a higher collective	Trees with material conservation or other cultural value	Mid blue
Frees of low quality with an estimated	very limited merit or such impaired condition that they do not qualify in higher categories	woodlands, but without	Trees with no material conservation or other cultural value	Grey



APPENDIX C - PHOTOGRAPHS







Photo. 1 - Ash and alder trees on the bank Photo. 2 - Ash and alder trees on the bank above Skinners Sike stream, viewed from the south-west.

above Skinners Sike stream, viewed from the east.



Photo. 3 - Silver birch and ash trees nos. 68-70, viewed from the tennis court to the



Photo. 4 - Distant view of the horse chestnut tree no. 97 and group of mixed planting no. G7, viewed from the northwest

east.





south.

Photo. 5 - Brownthwaites Wood with felled Photo. 6 - Brownthwaites Wood with felled area and retained trees, viewed from the area and retained trees, viewed from the west.





Photo. 7 - Sawley Lodge with felled trees on the bank to the south-west, viewed from the south-west.

Photo. 8 - Group of mixed planting no. G7, viewed from the south-west.



APPENDIX D - TREE CONSTRAINTS PLAN

(Greengage drawing no. 360/01)



APPENDIX E - TREE REMOVAL PLAN

(Greengage drawing no. 360/02)