

Arboricultural Survey to BS5837:2012

HSP Consulting Engineers Limited

**Coleg Sir Gar,
Pibwrlwyd Lane,
Carmarthen,
Carmarthenshire,
SA31 2NH**

12 March 2024

Thomas Ramm TechArborA

Table of Contents

If this report has been released electronically the appendices referred to herein can be found in the annexed zip folder/s as .pdf files. If this report has been released in hard copy the appendices will be bound into the back of this report. Plans are annexed separately as A0, A1, A2 or A3 as appropriate.

1. Introduction	2
2. Survey	2
3. BS5837:2012 Scope	5
4. Methodology	5
5. Definitions	7
6. Recommendations	8
7. Limitations	8
8. Appendices	9
Appendix 1: Table 1 Cascade chart for tree quality assessment	10
Appendix 2: Schedule of Trees	12
Appendix 3: Tree Constraints Plan	30
9. Document Production Record	36

1. Introduction

Arbtech Consulting Limited (Arbtech) received written instruction on 13 February 2024 from HSP Consulting Engineers Limited to attend Coleg Sir Gar, Pibwrlwyd Lane, Carmarthen, Carmarthenshire, SA31 2NH; grid reference, SN 41129 18247 (site) to undertake an arboricultural survey to BS5837:2012 guidance to assess trees, hedges and major shrub groups growing on and within influencing distance of the site and to produce a Schedule of Trees, Tree Constraints Plan, Arboricultural Impact Assessment, Arboricultural Method Statement and Tree Protection Plan.

I am Thomas Ramm, an arboricultural surveyor at Arbtech Consulting Ltd. I undertook the tree survey on 8 March 2024 and subsequently have produced this summary of my findings.

I have 14No years of professional industry experience including an additional 4No years as an Arboricultural instructor & technician at Warwickshire College Group. I hold a LANTRA award in professional tree inspection as well as a Level 3 qualification with an extended Diploma in Arboriculture and Forestry and I am a member of the Arboricultural Association at the Technician grade.

The advice below and appended is underwritten by our Professional Indemnity insurance for the business practice of Arboricultural Consultancy in the sum of one million Pounds Sterling in each and every claim.

Table 1: Documents referred to.

Document	Reference No.
Survey base drawing	5363
LPA pre-app comments	N/A
British Standard 5837:2012	“BS5837”
Tree Survey Schedule	Arbtech TS 01
Tree Constraints Plan	Arbtech TCP 01

2. Survey

Survey: An arboricultural survey to BS5837 of all trees within impacting distance of the site was undertaken by Thomas Ramm on 8 March 2024.

During the survey I categorised the trees using “Table 1 – Cascade chart for tree quality assessment” of the BS5837:2012 (see Appendix 1).

A total of 62No individual trees, 12No groups of trees and, 14No hedges were surveyed. Details for each of the trees surveyed are provided in the Schedule of Trees (see Appendix 2).

Multiple small trees and shrubs occupy the site, none of which meet the minimum diameter requirements to be considered for this survey.

Table 2: Documents upon which this tree survey has been based.

Document	Originator	Reference Number	Title
Survey Base Drawing	Mapmatic	5363	Topographical Survey

Limitations: The survey was made at ground level using visual observation only. Detailed examinations, such as climbing inspections and advanced decay detection equipment were not employed, though may form part of the survey's management recommendations. Measurements were taken using specialist tapes, laser, and GPS devices. Where this was not possible, measurements are estimated.

Scope: Pre-development tree surveys make arboricultural management recommendations based exclusively upon the individual tree or group of trees condition relative to their present context (*i.e. not in relation to the proposed development*).

Legal Status: No statutory protection check has been performed. BS5837 does not draw any distinction between trees subject to statutory protection, such as a Tree Preservation Order ("TPO"), and those trees without. This is principally because a detailed planning consent overrides any TPO protection. Consequently, we do not seek to offer any comparison between or infer any difference in the quality or importance of TPO trees and other trees.

* For more information on the surveyed trees please see Arbtech Consulting Ltd, Tree Survey Schedule (Appendix 1), Tree Survey Report and Tree Constraints Plan.

Site description

The site is situated on existing college grounds. Agricultural land is situated to the north and east of the site. The A484 is located to the west and south with the River Towy to the west. There are various topography level changes throughout the site with an incline to the northwest.



Figure 1: OS Map showing site location (Bing Maps)



Figure 2: Aerial Image of site with approximate red line boundary denoting area surveyed (Google Earth)

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3. BS5837:2012 Scope

This standard recognises that there can be problems for development close to existing trees which are to be retained, and of planting trees close to existing structures. This standard sets out to assist those concerned with trees, in relation to construction, to form balanced judgements. It does not set out to put arguments for or against development, or for the removal or retention of trees. Where development, including demolition, is to occur, the standard provides guidance on how to decide which trees are appropriate for retention, on the means of protecting these trees during development, including demolition and construction work, and on the means of incorporating trees into the developed landscape.

4. Methodology

The methodology used to assess the trees was the British Standard 5837:2012 'Trees in Relation to Construction' tree survey method. The aim of the survey is to establish which trees are moderate and good quality; suitable for retention and justifying protection. And which trees are low or poor quality; either undesirable or unsuitable to retain and protect.

The tree survey includes all trees included in the land survey red line boundary plan, as well as any that may have been missed, and it should categorize trees or groups of trees, including woodlands for their quality and value within the existing context, in a transparent, understandable, and systematic way. Where the arboriculturist has deemed it appropriate, the trees have been tagged with small metal or plastic tags, placed as high as is convenient on the stem of each tree.

Whilst master plan proposals for the development of the site might be available, the trees have been surveyed without taking these into consideration. All detailed design work on site layout should take into consideration the results of the tree survey (and the TCP).

Trees forming groups and areas of woodland (including orchards, wood pasture and historic parkland) are identified and considered as groups where the arboriculturist has determined that this is appropriate, particularly where they contain a variety of species and age classes that could aid long-term management. It is often expedient to assess the quality and value of such groups of trees as a whole, rather than as individuals. However, an assessment of individuals within any group has been undertaken if they are open-grown or if there is a need to differentiate between them.

The quality and value of each tree or group of trees has been recorded by allocating it to one of the four categories: **A**, **B**, **C**, or **U** (highest to lowest quality respectively). The categories are differentiated on the tree survey plan by colour, or by suffixing the category adjacent to the tree identification number on the TCP.

The survey schedule lists all the trees or groups of trees. The following information is also provided:

- a) reference number (to be recorded on the tree survey plan);
- b) species (common or scientific names);
- c) height in meters (m);
- d) stem diameter in millimetres (mm) at 1.5m above adjacent ground level or immediately above the root flare for multi-stemmed trees;
- e) branch spread in meters taken at the four cardinal compass points;
- f) height of crown clearance above adjacent ground level in meters (m);
- g) age class (newly planted, young, semi-mature, early mature, mature, over mature);
- h) physiological condition (e.g. good, fair, poor, decline and dead);
- i) structural condition (e.g. good, fair, poor or not visible);
- j) comment about the tree, its location and preliminary management recommendations, including further investigation of suspected defects that require more detailed assessment and potential for wildlife habitat;
- k) The retention category referring to the quality and useful contribution in years; **U** = <10yrs; **A** = >40yrs; **B** = >20yrs; **C** = >10yrs. The retention subcategory referring to the type of amenity; 1 = Arboricultural; 2 = Landscape; 3 = Cultural including conservation (see Appendix 1 Cascade chart for tree quality assessment).

5. Definitions

Arboriculturist

An arboriculturist (or arboricultural consultant) is a person who has, through relevant education, training, and experience, gained recognized qualifications and expertise in the field of trees in relation to construction.

Tree Survey

A tree survey should be undertaken by an arboriculturist and should record information about the trees on a site independently of and prior to any specific design for development. As a subsequent task, and with reference to a design or potential design, the results of the survey should be included in the preparation of a tree constraints plan, which should be used to assist with site layout design.

Tree Constraints Plan

A TCP is plan, typically delivered as an AutoCAD drawing (.DWG file format), prepared by an arboriculturist for the purposes of layout design showing the root protection area and representing the effect that the mature height and spread of retained trees will have on layouts through shade, dominance, etc.

Root Protection Area

An RPA is a layout design tool indicating the area surrounding a tree that contains sufficient rooting volume to ensure the survival of the tree, shown in plan form in m².

Construction Exclusion Zone (also termed Tree Protection Zone)

A construction exclusion or tree protection zone is an area based on the RPA (in m²), identified by an arboriculturist, to be protected during development, including demolition and construction work, by the use of barriers and/or ground protection fit for purpose to ensure the successful long-term retention of a tree.

Arboricultural Impact Assessment (AIA)

This is a study, undertaken by an arboriculturist, to identify, evaluate and possibly mitigate the extent of direct and indirect impacts on existing trees that may arise as a result of the implementation of any site layout proposal.

Tree Protection Plan (TPP)

A TPP is plan, typically delivered as an AutoCAD drawing (.DWG file format), prepared by an arboriculturist showing the finalized layout proposals, tree retention and tree and landscape protection measures detailed within the arboricultural method statement, which can be shown graphically.

Arboricultural Method Statement (AMS)

This is a methodology for the implementation of any aspect of development that has the potential to result in loss of or damage to a tree. The AMS is likely to include details of an on-site tree protection monitoring regime.

6. Recommendations

I have not seen the proposed scheme, therefore, we make the following recommendation to ensure that there are no irrevocable issues to the proposed retained trees and so that no conditions relating to arboriculture are attached to any planning consent secured; obtain an arboricultural report to include:

- a) An arboricultural impact assessment (AIA).
- b) An arboricultural method statement (AMS).
- c) A tree protection plan drawing (TPP).

7. Limitations

Trees were inspected from using visual observation from ground level only. Trees were not climbed or inspected below ground level. Inaccessible trees will have best estimates made about the location, physical dimensions, and characteristics. Trees have been grouped where BS5837 guides us that it is expedient to do so. Trees have been excluded from the survey if they are found by us to be sufficiently far away from the proposed developable area or if they are outside of the red line boundary plan showing the expectations of our client for the extent of the survey. BS5837 does not draw any distinction between trees subject to statutory protection, such as a Tree Preservation Order (“TPO”), and those trees without. This is principally because a detailed planning consent overrides any TPO protection. Consequently, we do not seek to offer any comparison between or infer any difference in the quality or importance of TPO trees and other trees.

8. Appendices

The following documents were released to the Client as appendices to this report:

- Survey Schedule (.PDF)
- Tree Constraints Plan drawing (.DWG & .PDF)

If you require clarification of information contained herein, please do not hesitate to contact us via 01244 661170.

Yours Sincerely,



Thomas Ramm TechArborA
Arboricultural Surveyor

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thomasramm@arbtech.co.uk

Appendix 1: Table 1 Cascade chart for tree quality assessment

BS5837:2012 Trees in relation to design, demolition and construction – Recommendations

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories when appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
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 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. <i>NOTE Category U trees can have existing or potential conservation value which might be desirable to preserve; see 4.5.7.</i>			Dark red
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
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 dominate 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
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remedial defects, including unsympathetic management and storm damage), such that they are unlikely to be suitable for retention of beyond 40 years; or trees lacking the special quality necessary to merit the category 'A' designation.	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.	Trees with material conservation or other cultural value.	Mid blue
Category C Trees of low quality with an estimated remaining expectancy of at least 10 years, or young trees with a stem diameter below 150mm.	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	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 value.	Trees with no material conservation or other cultural value.	Grey

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Ecology – Protected Species - Licensing – Arboriculture – Biodiversity Net Gain – Land/Topographical Survey

Appendix 2: Schedule of Trees

BS5837:2012 Tree Survey

Arbtech Consulting Limited

Client: HSP Consulting Engineers Limied
 Project: Coleg Sir Gar, Pibwrlwyd Lane, Carmarthenshire, SA312NH
 Survey Date: 08/03/2024
 Surveyor: Thomas Ramm

Unit 3, Well House Barns
 Chester Road
 Chester
 Cheshire
 CH4 0DH
 Phone: 01244661170

Tree and Tag No Species		Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
			No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
G01														
Various		14	1	410	N	6	2	SM	A: 76.1	Good	C: Good			B.1.2
See comments for details					E	6	2		R: 4.92		S: Good	Group is situated off site to the south; Group is comprised of circa 74+ stems with species to include cherry, scots pine, field maple, sycamore, hornbeam and hawthorn; Dimensions recorded represent maximum for group.	20+ yrs	
					S	6	2				B: Good			
					W	6	2							
G02														
A Group		12	1	300	N	3	0.5	SM	A: 40.7	Fair	C: Fair			C.1.2
See comments for details					E	3	0.5		R: 3.59		S: Fair	Group is situated to the southern boundary line; Group is comprised of circa 20+ stems of Lawson's cypress; Sparse foliage density throughout top of crown with browning to southern aspect at 8 m; Historically pruned to remove lower southern extent where wounds have not yet occluded; Naturally occurring deadwood typical for species.	10+ yrs	
					S	3	0.5				B: Good			
					W	3	0.5							
G03														
A Group		12	1	470	N	4	2	SM	A: 99.9	Good	C: Good			B.1.2
See comments for details					E	4	2		R: 5.63		S: Good	Group is situated south of building; Group is comprised of 6No stems of Lawson's cypress; Dimensions recorded represent maximum for group; Naturally occurring deadwood typical for species.	20+ yrs	
					S	4	2				B: Good			
					W	4	2							
G04														
Various		5	1	100	N	3	0.5	SM	A: 4.5	Good	C: Good			C.1.2
See comments for details					E	3	0.5		R: 1.19		S: Good	Group is situated north of building; Group is comprised of.circa 25+ stems with species to include contoneaster and scrub.	10+ yrs	
					S	3	0.5				B: Good			
					W	3	0.5							
Age Classifications:		N	Newly planted	EM	Early Mature		Condition:		C	Crown	Stems:		Ø	Diameter
		Y	Young	M	Mature				S	Stem			(Eq)	Equivalent stem diameter using BS5837:2012 definition
		SM	Semi-mature	OM	Over Mature				B	Basal area	ERC:		Estimated Remaining Contributio	

Tree and Tag No Species		Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
			No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
G05														
A Group <i>See comments for details</i>		13	1	480	N	3	0.5	SM	A: 104.2	Good	C: Good			B.1.2
					E	3	0.5		R: 5.75		S: Good	Group is situated to the west of building; Group is comprised of circa 10+ stems of Lawson's cypress; Dimensions recorded represent maximum for group.	20+ yrs	
					S	3	0.5				B: Good			
					W	3	0.5							
G06												Estimated Measurements		
Various <i>See comments for details</i>		15	1	420	N	5	0.5	SM	A: 79.8	Good	C: Good			B.1.2
					E	5	0.5		R: 5.03		S: Good	Group is situated to northern and eastern boundary line; Group is comprised of circa 30+ stems with species to include leylandii, willow, scots pine, poplar, alder and hawthorn; Dimensions recorded represent maximum for group; The tree population within the group are of good vigor.	20+ yrs	
					S	5	0.5				B: Good			
					W	5	0.5							
G07														
Various <i>See comments for details</i>		8	1	350	N	4	0.5	SM	A: 55.4	Good	C: Good			B.1.2
					E	4	0.5		R: 4.19		S: Good	Group is situated to the eastern boundary line; A drainage ditch runs to the western extent of group and is 1 m in depth x 1 m wide; Group is comprised of circa 10+ stems with species to include oak, hawthorn and sycamore; Dimensions recorded represent maximum for group.	20+ yrs	
					S	4	0.5				B: Good			
					W	4	0.5							
G08												Estimated Measurements		
Various <i>See comments for details</i>		12	1	500	N	6	0.5	SM	A: 113.1	Good	C: Good			B.1.2
					E	6	0.5		R: 6		S: Good	Group is situated to the south of main car park; Group is comprised of circa 25+ stems with species to include leylandii, alder, sycamore and ash; Dimensions recorded represent maximum for group.	20+ yrs	
					S	6	0.5				B: Good			
					W	6	0.5							
G09												Estimated Measurements		
Various <i>See comments for details</i>		12	1	500	N	5		SM	A: 113.1	Good	C: Good			B.1.2
					E	5	1		R: 6		S: Good	Group is situated to the boundary lines of college grounds; Group is comprised of circa 35+ stems with species to include oak, sycamore, ash, leylandii and beech; Tree tree population within the group are of good vigor; Dimensions recorded represent maximum for group.	20+ yrs	
					S	5	1				B: Good			
					W	5	1							
Age Classifications:		N	Newly planted	EM	Early Mature		Condition:		C	Crown	Stems:		Ø	Diameter
		Y	Young	M	Mature				S	Stem			(Eq)	Equivalent stem diameter using BS5837:2012 definition
		SM	Semi-mature	OM	Over Mature				B	Basal area	ERC:		Estimated Remaining Contributio	

Tree and Tag No Species		Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
			No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
G10												Estimated Measurements		
Various <i>See comments for details</i>		13	1	600	N E S W	6 6 6 6	1 1 1 1	EM A: 162.9 R: 7.2	Good	C: Good S: Good B: Good	Group is situated to the east of site; Group is comprised of circa 30+ stems with species to include oak, ash, sycamore and scrub; Dimensions recorded represent maximum for group; Overall the tree population within the group are of good vigor.			B.1.2 40+ yrs
G11												Estimated Measurements		
Viburnum <i>Viburnum Viburnum</i>		3	1	80	N E S W	1 1 1 1	0.5 0.5 0.5 0.5	SM A: 2.9 R: 0.96	Good	C: Good S: Good B: Good	Group is situated north of over extended car park; Group is comprised of circa 10+ stems of viburnum; Group is regularly maintained on top and sides to current dimensions.			C.2 10+ yrs
G12												Estimated Measurements		
Various <i>See comments for details</i>		12	1	240	N E S W	5 5 5 5	1 1 1 1	EM A: 26.1 R: 2.28	Good	C: Good S: Not visible B: Not visible	Off site group situated to adjacent property; Unable to gain a detailed inspection of base and stem due to restricted access; Group is comprised of circa 10+ stems with species to include leylandii and sycamore; Dimensions recorded represent an estimate for group.			B.1.2 20+ yrs
H01												Estimated Measurements		
Lawson Cypress <i>Chamaecyparis lawsoniana</i>		5	1	200	N E S W	1 1 1 1	0.5 0.5 0.5 0.5	SM A: 18.1 R: 2.4	Good	C: Good S: Good B: Good	Hedge is situated off site to adjacent property; Hedge is comprised of circa 20+ stems of Lawson's cypress; Hedge is regularly maintained on top and sides to current dimensions.			C.2 10+ yrs
H02												Estimated Measurements		
Various <i>See comments for details</i>		2	1	85	N E S W	1 1 1 1	0.5 0.5 0.5 0.5	SM A: 3.3 R: 1.02	Fair	C: Fair S: Good B: Good	Hedge is comprised of circa 10No stems with species to include hawthorn, holly and contoneaster; Sparse foliage density throughout crown.			C.2 10+ yrs
Age Classifications:		N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:		C S B	Crown Stem Basal area	Stems:		Ø (Eq)	Diameter Equivalent stem diameter using BS5837:2012 definition	ERC: Estimated Remaining Contributio

Tree and Tag No Species		Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
			No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
H03														
Various <i>See comments for details</i>		2	1	80	N	1	0.5	SM	A: 2.9 R: 0.96	Good	C: Good S: Good B: Good	Fragmented hedge-line situated to the west and northern boundary line; Hedge is comprised of circa 60+ stems with species to include cherry laurel and holly; Hedge is regularly maintained on top and sides to current dimensions.		C.2 10+ yrs
H04												Estimated Measurements		
A Hedge <i>See comments for details</i>		3	1	85	N	1	0.5	SM	A: 3.3 R: 1.02	Good	C: Good S: Good B: Good	Off site linear hedge-line belonging to adjacent agricultural land; Hedge is comprised of circa 300+ stems of hawthorn; Hedge is regularly maintained on top and sides to current dimensions.		C.2 10+ yrs
H05														
A Hedge <i>See comments for details</i>		2	1	80	N	1	0.5	SM	A: 2.9 R: 0.96	Fair	C: Good S: Good B: Good	Fragmented hedge-line comprised of circa 50+ stems with species to include beech, hawthorn and holly; Sparse foliage density throughout hedge; Hedge is regularly maintained on top and sides to current dimensions.		C.2 10+ yrs
H06														
A Hedge <i>See comments for details</i>		2	1	80	N	1	0.5	SM	A: 2.9 R: 0.96	Good	C: Good S: Good B: Good	Linear hedge-line situated to south of main building; Hedge is comprised of circa 10+ stems of cherry laurel; Hedge is regularly maintained on top and sides to current dimensions.		C.2 10+ yrs
H07														
A Hedge <i>See comments for details</i>		2	1	80	N	1	0.5	SM	A: 2.9 R: 0.96	Good	C: Good S: Good B: Good	Linear hedge-line situated to south of main building; Hedge is comprised of circa 10+ stems of cherry laurel; Hedge is regularly maintained on top and sides to current dimensions.		C.2 10+ yrs
H08														
A Hedge <i>See comments for details</i>		2	1	80	N	1	0.5	SM	A: 2.9 R: 0.96	Good	C: Good S: Good B: Good	Hedge is situated to the south of property; Hedge is comprised of circa 20+ stems of beech; Hedge is regularly maintained on top and sides to current dimensions.		C.2 10+ yrs
Age Classifications:		N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:		C S B	Crown Stem Basal area	Stems:		Ø Diameter (Eq) Equivalent stem diameter using BS5837:2012 definition	ERC: Estimated Remaining Contributio	

Tree and Tag No Species		Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
			No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
H09														
A Hedge <i>See comments for details</i>		2	1	80	N	1	0.5	SM	A: 2.9 R: 0.96	Good	C: Good S: Good B: Good	Hedge is situated to the south of property; Hedge is comprised of circa 20+ stems of beech; Hedge is regularly maintained on top and sides to current dimensions.		C.2 10+ yrs
H10														
Various <i>See comments for details</i>		3	1	90	N	1	0.5	SM	A: 3.7 R: 1.08	Good	C: Good S: Good B: Good	Linear hedge-line comprised of circa 300+ stems of beech and hawthorn; Hedge is regularly maintained on top and sides to current dimensions.		C.2 10+ yrs
H11														
A Hedge <i>See comments for details</i>		2	1	90	N	1	0.5	SM	A: 3.7 R: 1.08	Good	C: Good S: Good B: Good	Fragmented hedge-line situated to the south of site; Hedge is comprised of circa 400+ stems with species to include beech, hawthorn and hazel; Hedge is regularly maintained on top and sides to current dimensions.		C.2 10+ yrs
H12														
A Hedge <i>See comments for details</i>		2	1	90	N	1	0.5	SM	A: 3.7 R: 1.08	Good	C: Good S: Good B: Good	Fragmented hedge-line situated to the west of site; Hedge is comprised of circa 400+ stems with species to include beech, hawthorn and hazel; Hedge is regularly maintained on top and sides to current dimensions.		C.2 10+ yrs
H13														
Various <i>See comments for details</i>		1	1	75	N	1	0.5	SM	A: 2.5 R: 0.89	Fair	C: Good S: Good B: Good	Linear hedge-line situated north of animal care workshop; Hedge is comprised of circa 50+ stems with species to include hawthorn, cherry laurel and scrub; Sparse foliage throughout hedge-line.		C.2 10+ yrs
Age Classifications:		N	Newly planted	EM	Early Mature		Condition:		C	Crown	Stems:		Ø	Diameter
		Y	Young	M	Mature				S	Stem			(Eq)	Equivalent stem diameter using BS5837:2012 definition
		SM	Semi-mature	OM	Over Mature				B	Basal area	ERC:			Estimated Remaining Contributio

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC	
		No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment				
H14														
A Hedge	1	1	80	N	1	0.5	SM	A: 2.9	Good	C: Good	Fragmented linear hedge-line situated north of Automotive workshop; Hedge is comprised of circa 15+ stems of beech; Hedge is regularly maintained on top and sides to current dimensions.			C.2
							R: 0.96		S: Good	10+ yrs				
									B: Good					
T01														
Sycamore	9	1	380	N	3	2	SM	A: 65.3	Good	C: Good	Tree is situated within group; Main stem leans to the north from base; Naturally occurring deadwood typical for species.			B.1.2
							R: 4.55		S: Good	20+ yrs				
									B: Good					
T02														
Cherry	8	1	280	N	2	2	SM	A: 35.5	Good	C: Fair	Tree is situated within group; Unable to gain a detailed inspection of main stem due to ivy; Naturally occurring deadwood typical for species.			C.1.2
							R: 3.36		S: Ivy	10+ yrs				
									B: Good					
T03														
Sycamore	9	1	380	N	3	2	SM	A: 65.3	Good	C: Good	Tree is situated within group; Main stem leans to the north from base; Naturally occurring deadwood typical for species.			B.1.2
							R: 4.55		S: Good	20+ yrs				
									B: Good					
T04														
Cherry	6	1	240	N	1	2	SM	A: 26.1	Good	C: Fair	Tree is situated within group; Unable to gain a detailed inspection of main stem due to ivy; Main stem leans heavily to the south west from base through wooden panel fencing; Naturally occurring deadwood typical for species.			C.1.2
							R: 2.88		S: Fair	10+ yrs				
									B: Good					
T05														
Common Hornbeam	11	3	362	(Eq) N	2	1	SM	A: 59.2	Fair	C: Good	Estimated Measurements			C.1.2
							R: 4.34		S: Fair	10+ yrs				
									B: Good					
Age Classifications:	N	Newly planted	EM	Early Mature				Condition:	C	Crown	Stems:	Ø	Diameter	
	Y	Young	M	Mature					S	Stem		(Eq)	Equivalent stem diameter using BS5837:2012 definition	
	SM	Semi-mature	OM	Over Mature					B	Basal area	ERC:		Estimated Remaining Contributio	

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
		No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
T06													
Lawson Cypress <i>Chamaecyparis lawsoniana</i>	4	1	180	N	1	0.5	SM	A: 14.7 R: 2.16	Good	C: Good S: Good B: Good	Tree is situated on raised bedded area to southern boundary line; Naturally occurring deadwood typical for species.	C.1.2 10+ yrs	
T07													
Lawson Cypress <i>Chamaecyparis lawsoniana</i>	4	1	180	N	1	0.5	SM	A: 14.7 R: 2.16	Good	C: Good S: Good B: Good	Tree is situated on raised bedded area to southern boundary line; Naturally occurring deadwood typical for species.	C.1.2 10+ yrs	
T08											Estimated Measurements		
Willow <i>Salix sp.</i>	6	1	200	N	4	1	SM	A: 18.1 R: 2.4	Decline	C: Poor S: Not visible B: Not visible	Tree is situated to the southern boundary line; Unable to gain a detailed inspection of base and stem due to scrub restricting access; Tree is in decline with approximately 5% of live crown remaining.	U <10 yrs	
T09													
Goat Willow <i>Salix caprea</i>	10	1	430	N	4	3	SM	A: 83.7 R: 5.16	Good	C: Good S: Good B: Good	Tree is situated to the west of main drive; Historically pollarded with profuse regeneration; Naturally occurring deadwood typical for species.	B.1.2 20+ yrs	
T10													
Field Maple <i>Acer campestre</i>	4	5	263 (Eq)	N	2	1	SM	A: 31.3 R: 3.15	Good	C: Good S: Fair B: Good	Tree is situated south of building; Subsidiary stems from base comprised of 5No stems; Ivy from base to 3 m; Naturally occurring deadwood typical for species; Overall the tree is of good vigor.	C.1 10+ yrs	
Age Classifications: N Newly planted EM Early Mature Condition: C Crown Stems: Ø Diameter Y Young M Mature S Stem (Eq) Equivalent stem diameter using BS5837:2012 definition SM Semi-mature OM Over Mature B Basal area ERC: Estimated Remaining Contribution													

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
		No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
T11													
Turkey Oak <i>Quercus cerris</i>	12	1	580	N E S W	6 6 5 3	3	EM A: 152.2 R: 6.96	Good	C: Good S: Good B: Good	Tree is situated to the east of art block; Main stem bifurcates to codominant stem at 3 m; Historically pruned to main stem on southern aspect where wounded have not yet occluded; Asymmetrical crown due to suppression from adjacent companion tree; Naturally occurring deadwood typical for species.			B.1.2 40+ yrs
T12													
Turkey Oak <i>Quercus cerris</i>	11	1	350	N E S W	0 2 4 1	4	SM A: 55.4 R: 4.19	Poor	C: Poor S: Good B: Good	Tree is situated to the east of art block; Main stem bifurcates to codominant stem at 3 m; Asymmetrical crown due to suppression from adjacent companion tree; Poor physiological condition due to low foliage density throughout crown; Naturally occurring deadwood typical for species.			C.1.2 10+ yrs
T13													
Cherry <i>Prunus sp.</i>	5	1	310	N E S W	3 3 3 3	2	EM A: 43.5 R: 3.72	Poor	C: Fair S: Good B: Not visible	Tree is situated to the east of Art Block; Historically pruned to height and lateral extent on all aspects; Crown has sparse foliage density throughout crown with atypical volume of deadwood for species.			C.1.2 <10 yrs
T14													
Manna Ash <i>Fraxinus ornus</i>	6	4	444 (Eq)	N E S W	4 4 3 4	3	EM A: 89.1 R: 5.32	Fair	C: Good S: Ivy B: Good	Tree is situated east of smoking area; Unable to gain a detailed inspection of main stem due to ivy; Crown breaks at 2 m to 4No stems; Sparse foliage density throughout crown.			C.1.2 10+ yrs
T15													
Manna Ash <i>Fraxinus ornus</i>	6	3	361 (Eq)	N E S W	4 4 3 4	2	EM A: 58.8 R: 4.32	Fair	C: Good S: Good B: Good	Tree is situated south of smoking area; Unable to gain a detailed inspection of main stem due to ivy; Crown breaks at 0.5 m m to 3No stems; Sparse foliage density throughout crown.			C.1.2 10+ yrs
Age Classifications:	N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:			C S B	Crown Stem Basal area	Stems:	Ø (Eq)	Diameter Equivalent stem diameter using BS5837:2012 definition	ERC: Estimated Remaining Contributio

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
		No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
T16													
Manna Ash <i>Fraxinus ornus</i>	6	2	291 (Eq)	N	3	2	EM	A: 38.2 R: 3.48	Fair	C: Good S: Good B: Good	Tree is situated south of smoking area; Unable.to gain a detailed inspection of main stem due to ivy; Crown breaks at 0.5 m m to 2No stems; Sparse foliage density throughout crown.		C.1.2 10+ yrs
T17											Estimated Measurements		
Cherry Laurel <i>Prunus laurocerasus</i>	4	3	289 (Eq)	N	3	0.5	SM	A: 37.9 R: 3.47	Good	C: Good S: Good B: Good	Situated east of building; Subsidiary stems from base.comprised of 3No stems; Naturally occurring deadwood typical for species.		C.1.2 10+ yrs
T18													
Cherry <i>Prunus sp.</i>	7	1	400	N	4	2	EM	A: 72.4 R: 4.8	Good	C: Good S: Ivy B: Good	Tree is situated west of building; Unable to gain a detailed inspection of main stem due to ivy; Naturally occurring deadwood typical for species.		B.1 20+ yrs
T19													
Sycamore <i>Acer pseudoplatanus</i>	10	1	620	N	4	3	EM	A: 173.9 R: 7.44	Good	C: Good S: Good B: Good	Crown breaks to 4No stems at 2.2 m; Naturally occurring deadwood typical for species.		B.1.2 20+ yrs
T20													
Silver Birch <i>Betula pendula</i>	8	1	320	N	3	4	SM	A: 46.3 R: 3.83	Good	C: Good S: Ivy B: Good	Tree is situated within group; Unable to gain a detailed.inspection of main stem due to ivy from ground level to 5 m into crown; Main stem bifurcates to codominant stem at 2.5 m; Naturally occurring deadwood typical for species.		B.1.2 20+ yrs
T21													
Silver Birch <i>Betula pendula</i>	8	1	370	N	3	4	SM	A: 61.9 R: 4.43	Good	C: Good S: Good B: Good	Tree is situated to the east of group; Naturally occurring deadwood typical for species.		B.1.2 20+ yrs
Age Classifications:	N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature			Condition:	C S B	Crown Stem Basal area			Stems: ERC:	Ø Diameter (Eq) Equivalent stem diameter using BS5837:2012 definition Estimated Remaining Contributio

Tree and Tag No Species		Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
			No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
T22														
Silver Birch	9	1	380	N	3	4	SM	A: 65.3	Good	C: Good				B.1.2
				E	2	4		R: 4.55		S: Good	Tree is situated to the east of group; Naturally occurring deadwood typical for species.			20+ yrs
				S	4	4				B: Good				
				W	5	4								
T23														
Sycamore	11	1	540	N	4	3	EM	A: 131.9	Good	C: Good				B.1.2
				E	6	3		R: 6.47		S: Good	Tree is situated to the west of building; Naturally occurring deadwood typical for species.			20+ yrs
				S	7	3				B: Good				
				W	6	3								
T24														
Silver Birch	9	1	300	N	3	3	SM	A: 40.7	Good	C: Good				B.1.2
				E	3	3		R: 3.59		S: Good	Tree is situated to the west of building; Naturally occurring deadwood typical for species.			20+ yrs
				S	3	3				B: Good				
				W	3	3								
T25														
Sycamore	8	1	320	N	3	3	SM	A: 46.3	Good	C: Good				B.1.2
				E	4	3		R: 3.83		S: Ivy	Tree is situated within hedge-line; Unable.tp gain a detailed inspection of base and stem due to hedge and ivy restricting access; Historically pruned to the western lateral extent to appropriate attachment points; Naturally occurring deadwood typical for species.			20+ yrs
				S	3	2				B: Not visible				
				W	5	3								
T26														
Sycamore	8	1	300	N	3	3	SM	A: 40.7	Good	C: Good				B.1.2
				E	4	3		R: 3.59		S: Ivy	Tree is situated within hedge-line; Unable.tp gain a detailed inspection of base and stem due to hedge and ivy restricting access; Historically pruned to the western lateral extent to appropriate attachment points; Naturally occurring deadwood typical for species.			20+ yrs
				S	3	2				B: Not visible				
				W	5	3								
Age Classifications:		N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:		C S B	Crown Stem Basal area	Stems:		Ø (Eq)	Diameter Equivalent stem diameter using BS5837:2012 definition	ERC: Estimated Remaining Contributio

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
		No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
T27													
Sycamore <i>Acer pseudoplatanus</i>	8	1	300	N E S W	3 4 3 5	3	SM A: 40.7 R: 3.59	Good	C: Good S: Ivy B: Not visible	Tree is situated within hedge-line; Unable to gain a detailed inspection of base and stem due to hedge and ivy restricting access; Historically pruned to the western lateral extent to appropriate attachment points; Naturally occurring deadwood typical for species.			B.1.2 20+ yrs
T28													
Common Hornbeam <i>Carpinus betulus</i>	8	1	360	N E S W	4 4 4 4	2	SM A: 58.6 R: 4.31	Good	C: Good S: Good B: Good	Tree is situated within hedge-line; Naturally occurring deadwood typical for species.			B.1.2 20+ yrs
T29													
Common Hornbeam <i>Carpinus betulus</i>	8	4	351 (Eq)	N E S W	4 4 4 4	2	SM A: 55.9 R: 4.21	Good	C: Good S: Good B: Good	Tree is situated within hedge-line; Crown breaks to 4No stems at 1 m; Naturally occurring deadwood typical for species.			B.1.2 20+ yrs
T30													
Sycamore <i>Acer pseudoplatanus</i>	11	1	480	N E S W	5 4 4 5	3	SM A: 104.2 R: 5.75	Fair	C: Fair S: Good B: Good	Tree is situated east of hedge-line; Epicormic regeneration from base; Asymmetrical crown due to suppression from adjacent companion tree; Sparse foliage density throughout crown with atypical volume of deadwood for species			C.1.2 10+ yrs
T31													
Sycamore <i>Acer pseudoplatanus</i>	11	3	579 (Eq)	N E S W	5 4 4 5	3	SM A: 151.9 R: 6.95	Good	C: Good S: Good B: Good	Main stem trifurcates at 0.5 m to 3No stems; Naturally occurring deadwood typical for species.			B.1.2 20+ yrs
Age Classifications:	N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:			C S B	Crown Stem Basal area	Stems:	Ø (Eq)	Diameter Equivalent stem diameter using BS5837:2012 definition	ERC: Estimated Remaining Contribution

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
		No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
T32													
Common Hawthorn <i>Crataegus monogyna</i>	4	1	290	N	1	2	SM	A: 38.1	Fair	C: Good			C.1.2
				E	2	2		R: 3.48		S: Good	Tree is situated to northern boundary line; Historically pruned to southern lateral extent to appropriate attachment points; Naturally occurring deadwood typical for species.		10+ yrs
				S	2	2				B: Good			
				W	2	2							
T33													
Common Hawthorn <i>Crataegus monogyna</i>	4	1	280	N	1	2	SM	A: 35.5	Fair	C: Good			C.1.2
				E	2	2		R: 3.36		S: Good	Tree is situated to northern boundary line; Historically pruned to southern lateral extent to appropriate attachment points; Naturally occurring deadwood typical for species.		10+ yrs
				S	2	2				B: Good			
				W	2	2							
T34													
Common Hawthorn <i>Crataegus monogyna</i>	4	1	210	N	1	2	SM	A: 20	Fair	C: Good			C.1.2
				E	2	2		R: 2.52		S: Good	Tree is situated to northern boundary line; Historically pruned to southern lateral extent to appropriate attachment points; Naturally occurring deadwood typical for species.		10+ yrs
				S	2	2				B: Good			
				W	2	2							
T35													
Common Hawthorn <i>Crataegus monogyna</i>	4	1	330	N	3	2	SM	A: 49.3	Good	C: Good			B.1.2
				E	2	2		R: 3.96		S: Good	Tree is situated to northern boundary line; Historically pruned to southern lateral extent to appropriate attachment points; Naturally occurring deadwood typical for species.		20+ yrs
				S	2	2				B: Good			
				W	2	2							
T36													
Apple <i>Malus sp.</i>	5	1	260	N	3	2	SM	A: 30.6	Fair	C: Good			C.1.2
				E	3	2		R: 3.12		S: Good	Tree is situated to northern boundary line; Low foliage density throughout crown with naturally occurring deadwood typical for species.		10+ yrs
				S	3	2				B: Good			
				W	3	2							
T37													
Common Oak <i>Quercus robur</i>	5	1	300	N	3	2	SM	A: 40.7	Good	C: Good			B.1.2
				E	3	2		R: 3.59		S: Good	Tree is situated to northern boundary line; Naturally occurring deadwood typical for species.		40+ yrs
				S	3	2				B: Good			
				W	3	2							
Age Classifications:	N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature			Condition:	C S B	Crown Stem Basal area		Stems: ERC:	Ø Diameter (Eq) Equivalent stem diameter using BS5837:2012 definition Estimated Remaining Contributio	

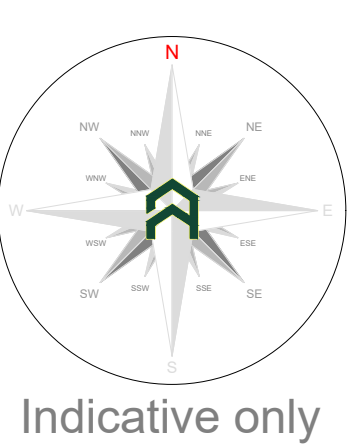
Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
		No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
T38													
Cedar of Lebanon <i>Cedrus libani</i>	6	1	170	N	2	0.5	SM	A: 13.1 R: 2.04	Good	C: Good S: Good B: Good	Tree is situated to the east of Block A; No notable features.	C.1 10+ yrs	
T39													
Sycamore <i>Acer pseudoplatanus</i>	10	2	743 (Eq)	N	6	2	EM	A: 250 R: 8.92	Good	C: Good S: Good B: Good	Tree is situated to the east of Block A; Main stem bifurcates to codominant stem at 1 m; Naturally occurring deadwood typical for species.	B.1.2 20+ yrs	
T40													
Sycamore <i>Acer pseudoplatanus</i>	9	1	390	N	5	2	SM	A: 68.8 R: 4.67	Good	C: Good S: Good B: Good	Tree is situated to the east of Block A; Naturally occurring deadwood typical for species.	B.1.2 20+ yrs	
T41													
Sycamore <i>Acer pseudoplatanus</i>	9	1	300	N	5	2	SM	A: 40.7 R: 3.59	Good	C: Good S: Good B: Good	Tree is situated to the east of Block A; Naturally occurring deadwood typical for species.	B.1.2 20+ yrs	
T42													
Common Ash <i>Fraxinus excelsior</i>	6	1	220	N	3	1	SM	A: 21.9 R: 2.64	Fair	C: Fair S: Good B: Good	Tree is situated to northern boundary line; Asymmetrical crown due to suppression from adjacent companion tree; Crown showing early signs of <i>Hymenocyphus fraxineus</i> .	C.1.2 10+ yrs	
T43													
Sycamore <i>Acer pseudoplatanus</i>	5	1	260	N	3	1	SM	A: 30.6 R: 3.12	Fair	C: Good S: Good B: Good	Tree is situated to northern boundary line; Asymmetrical crown due to suppression from adjacent companion tree; Naturally occurring deadwood typical for species; Low foliage density throughout crown.	C.1.2 10+ yrs	
Age Classifications:	N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature			Condition:	C S B	Crown Stem Basal area		Stems: Ø Diameter (Eq) Equivalent stem diameter using BS5837:2012 definition ERC: Estimated Remaining Contributio		

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
		No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
T44													
Common Alder <i>Alnus glutinosa</i>	5	3	245 (Eq)	N	3	0.5	SM	A: 27.2 R: 2.94	Fair	C: Fair S: Fair B: Good	Tree is situated within fragmented hedge-line; Crown breaks to 3No stems at 0.5 m; Low foliage density throughout crown.	C.1.2 10+ yrs	
T45													
Common Beech <i>Fagus sylvatica</i>	8	1	710	N	8	3	EM	A: 228.1 R: 8.52	Good	C: Good S: Good B: Good	Tree is situated within group; Historically pruned.to the southern extent to appropriate attachment points; Naturally occurring deadwood typical for species.	B.1.2 20+ yrs	
T46													
Whitebeam <i>Sorbus aria</i>	7	1	460	N	4	3	SM	A: 95.7 R: 5.51	Good	C: Good S: Good B: Good	Tree is situated to the north of Block D; Naturally occurring deadwood typical for species.	B.1.2 20+ yrs	
T47													
Whitebeam <i>Sorbus aria</i>	7	1	430	N	4	3	SM	A: 83.7 R: 5.16	Good	C: Good S: Good B: Good	Tree is situated to the north of Block D; Naturally occurring deadwood typical for species.	B.1.2 20+ yrs	
T48													
Whitebeam <i>Sorbus aria</i>	7	1	520	N	4	3	SM	A: 122.3 R: 6.23	Good	C: Good S: Good B: Good	Tree is situated to the north of Block D; Naturally occurring deadwood typical for species.	B.1.2 20+ yrs	
T49													
Whitebeam <i>Sorbus aria</i>	7	1	490	N	4	3	SM	A: 108.6 R: 5.87	Good	C: Good S: Good B: Good	Tree is situated to the north of Block D; Naturally occurring deadwood typical for species.	B.1.2 20+ yrs	
Age Classifications:	N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature			Condition:	C S B	Crown Stem Basal area			Stems: Ø Diameter (Eq) Equivalent stem diameter using BS5837:2012 definition ERC: Estimated Remaining Contributio	

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
		No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
T50													
Whitebeam <i>Sorbus aria</i>	4	1	200	N	2	2	SM	A: 18.1 R: 2.4	Fair	C: Fair S: Fair B: Good	Historical mechanical damage at 1 m to main stem on northern aspect; Historical limb failure at 2 m to western aspect; Low foliage density throughout crown.		C.1 10+ yrs
T51													
Whitebeam <i>Sorbus aria</i>	4	1	200	N	2	2	SM	A: 18.1 R: 2.4	Fair	C: Fair S: Fair B: Good	Tree is situated to southern boundary line; Historically pruned to lateral extent on all aspects to appropriate attachment points; Low foliage density throughout crown with atypical volume of deadwood for species.		C.1 10+ yrs
T52											Estimated Measurements		
Silver Birch <i>Betula pendula</i>	8	2	269	(Eq) N	3	1	SM	A: 32.8 R: 3.23	Fair	C: Good S: Not visible B: Not visible	Unable to gain a detailed inspection of base and main stem due to scrub restricting access; Main stem bifurcates to codominant stem at 1 m; Overhead crown conflict with telephone cables to the north; Naturally occurring deadwood typical for species.		C.1.2 10+ yrs
T53													
Common Hornbeam <i>Carpinus betulus</i>	6	4	520	(Eq) N	3	2	SM	A: 122.2 R: 6.23	Good	C: Good S: Good B: Good	Tree is situated to the west of drive to animal care unit; Main stem breaks to 4No stems at 1 m; Naturally occurring deadwood typical for species.		B.1.2 20+ yrs
T54													
Silver Birch <i>Betula pendula</i>	8	3	352	(Eq) N	3	2	SM	A: 56.2 R: 4.22	Good	C: Good S: Good B: Good	Tree is situated to the west of drive to animal care workshop; Main stem trifurcates at ground level; Overhead telephone cable conflict with crown to the north; Naturally occurring deadwood typical for species.		B.1.2 20+ yrs
Age Classifications:	N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:			C S B	Crown Stem Basal area	Stems:	Ø (Eq)	Diameter Equivalent stem diameter using BS5837:2012 definition	ERC: Estimated Remaining Contributio

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
		No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
T55													
Maidenhair Tree <i>Ginkgo biloba</i>	4	2	136 (Eq)	N	2	1	SM	A: 8.4 R: 1.63	Good	C: Good S: Good B: Good	Main stem bifurcates at 0.5 m to codominant stem; Naturally occurring deadwood typical for species.	C.1 10+ yrs	
T56													
Small-Leafed Lime <i>Tilia cordata</i>	5	1	190	N	2	2	SM	A: 16.3 R: 2.27	Good	C: Good S: Good B: Good	Tree is situated north of Automotive workshop; Naturally occurring deadwood typical for species.	C.1 10+ yrs	
T57													
Small-Leafed Lime <i>Tilia cordata</i>	5	1	190	N	2	2	SM	A: 16.3 R: 2.27	Good	C: Good S: Good B: Good	Tree is situated north of Automotive workshop; Naturally occurring deadwood typical for species.	C.1 10+ yrs	
T58													
Small-Leafed Lime <i>Tilia cordata</i>	5	1	240	N	2	2	SM	A: 26.1 R: 2.88	Good	C: Good S: Good B: Good	Tree is situated north of Automotive workshop; Naturally occurring deadwood typical for species.	C.1 10+ yrs	
T59													
Common Alder <i>Alnus glutinosa</i>	6	1	290	N	2	3	SM	A: 38.1 R: 3.48	Fair	C: Fair S: Good B: Good	Main stem bifurcates at 2 m to codominant stem; Sparse foliage density throughout crown; Naturally occurring deadwood typical for species.	C.1 10+ yrs	
T60													
Western Red Cedar <i>Thuja plicata</i>	16	1	920	N	4	5	M	A: 383 R: 11.04	Good	C: Good S: Ivy B: Good	Tree is situated to the north of extended car park; Ivy restricts detailed inspection of main stem; Naturally occurring deadwood typical for species.	B.1.2 20+ yrs	
Age Classifications:	N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:			C S B	Crown Stem Basal area	Stems: Ø Diameter (Eq) Equivalent stem diameter using BS5837:2012 definition ERC: Estimated Remaining Contributio			

Appendix 3: Tree Constraints Plan



Tree Categories

These are categorised in accordance with the cascade chart in Table 3 of the British Standard BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'

Category 'A' - Trees in such condition that they cannot realistically be retained as living trees in context of the current land use for longer than 10 years.

Category 'B' - Trees of high quality with an estimated remaining life expectancy of at least 40 years.

Category 'C' - Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

Category 'U' - Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

Root Protection Area

In order to avoid damage to the roots or rooting environment of retained trees, the Root Protection Areas (RPAs) should be plotted around each of the category 'A' and 'B' trees. This is a minimum area in m² which should be left undisturbed around each retained tree.

The RPA is calculated using the British Standard BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.

The calculated RPA is capped to 707m², which is the equivalent to a circle with a radius of 15m. Where there appears to be restrictions to root growth the root protection area is reshaped to more accurately reflect the likely distribution of the roots.

Tree Survey Report

Please refer to Arbttech Consulting Ltd. Tree Survey Report and Tree Schedule for full details on all surveyed trees, hedgerows and major shrub groups.

All trees were surveyed and categorised in accordance with the guidance as set out in the British Standard BS5837:2012 Tree in relation to design, demolition and construction Recommendations.

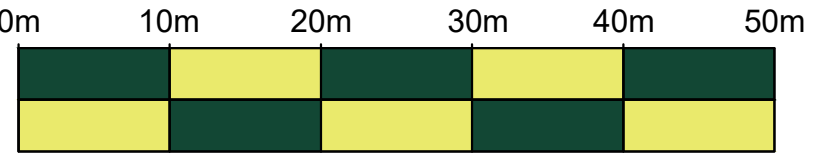
We make the following recommendation to ensure that no conditions relating to arboriculture are attached to any planning consent secured: obtain and arboricultural report to include:

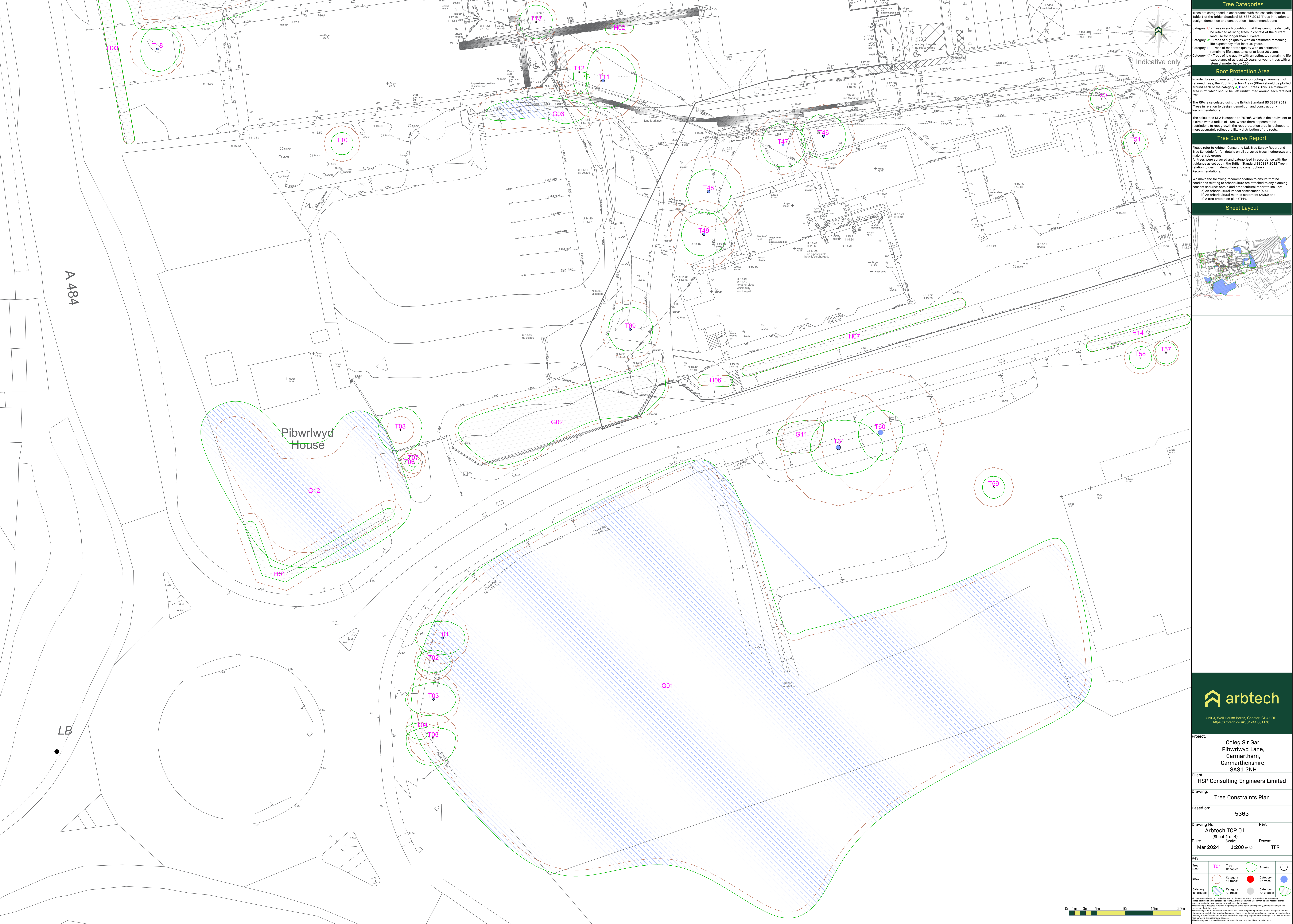
- a) An arboricultural impact assessment (AIA);
- b) An arboricultural method statement (AMS); and
- c) A tree protection plan (TPP).

**arbttech**

Unit 3, Well House Barns, Chester, CH4 0DH
<https://arbttech.co.uk> 01244 661170

Project:		Coleg Sir Gar, Pibwrlwyd Lane, Carmarthenshire, SA31 2NH	
Client:		HSP Consulting Engineers Limited	
Drawing:		Tree Constraints Plan	
Based on:		5363	
Drawing No:		Arbttech TCP 01 (Overview)	Rev:
Date:	Mar 2024	Scale:	1:500 @ A0
Key:		TFR	
Tree No.:	T01	Tree Category:	Category 'A' trees
RPA:	Category 'A' trees	Category 'B' trees	Category 'C' trees
Category 'B' groups	Category 'C' trees	Category 'B' groups	Category 'C' groups





Tree Categories

These are categorised in accordance with the cascade chart in Table 3 of the British Standard BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'

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Sheet Layout

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Unit 3, Well House Barns, Chester, CH4 0DH
https://arbttech.co.uk 01244 661170

Project:

Coleg Sir Gar,
Pibwrlwyd Lane,
Carmarthenshire,
SA31 2NH

Client:

HSP Consulting Engineers Limited

Drawing:

Tree Constraints Plan

Based on:

5363

Drawing No:

Arbttech TCP 01
(Sheet 1 of 4)

Rev:

Date:

Mar 2024

Scale:

1:200 @ A0

Drawn:

TFR

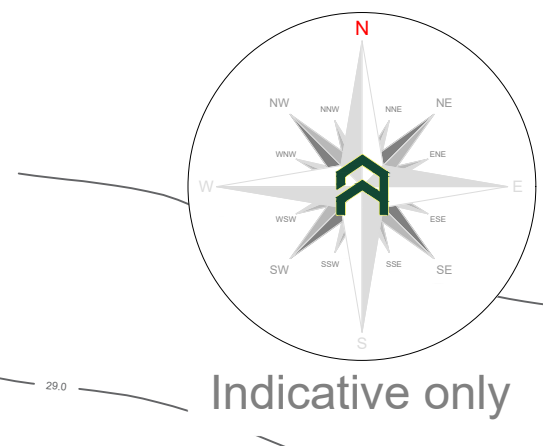
Key:

Tree Nos.:	T01	Tree Categories:	Trunk:	
RPA:	Category 'A' trees	Category 'B' trees	Category 'C' trees	
Category 'B' groups:	Category 'C' trees	Category 'C' groups		

All work proposed should be checked with the relevant authorities prior to the start of the work. The information provided in this drawing is for guidance only and does not constitute a contract. The client is responsible for ensuring that the work is carried out in accordance with the relevant regulations and standards. The information provided in this drawing is for guidance only and does not constitute a contract. The client is responsible for ensuring that the work is carried out in accordance with the relevant regulations and standards. The information provided in this drawing is for guidance only and does not constitute a contract. The client is responsible for ensuring that the work is carried out in accordance with the relevant regulations and standards.

A 484

A 48



Tree Categories

These are categorised in accordance with the cascade chart in Table 3 of the British Standard BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.

Category 'T' - Trees in such condition that they cannot realistically be retained as living trees in context of the current land use for longer than 10 years.

Category 'V' - 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 150mm.

Root Protection Area

In order to avoid damage to the roots or rooting environment of retained trees, the Root Protection Areas (RPAs) should be plotted around each of the category 'A, B and 'C' trees. This is a minimum area in m² which should be left undisturbed around each retained tree.

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- b) An arboricultural method statement (AMS); and
- c) A tree protection plan (TPP).

Sheet Layout



Unit 3, Well House Barns, Chester, CH4 0DH
<https://arbtech.co.uk> 01244 661170

Project: Coleg Sir Gar, Pibwrlwyd Lane, Carmarthenshire, SA31 2NH

Client: HSP Consulting Engineers Limited

Drawing: Tree Constraints Plan

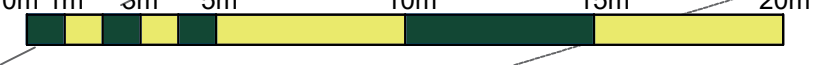
Based on: 5363

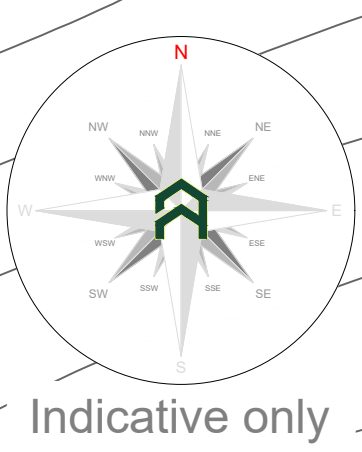
Drawing No: Arbtech TCP 01 (Sheet 2 of 4)

Date: Mar 2024 Scale: 1:200 @ AD

Rev: TFR

Key:			
Tree No.:	T01	Tree Categories:	Trunk
RPA:	Category 'V' trees	Category 'B' trees	Category 'C' groups
Category 'B' groups:	Category 'C' trees	Category 'C' groups	





Tree Categories

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Project:

Coleg Sir Gar,
Pibwrlwyd Lane,
Carmarthenshire,
SA31 2NH

Client:

HSP Consulting Engineers Limited

Drawing:

Tree Constraints Plan

Based on:

5363

Drawing No:

Arbtech TCP 01
(Sheet 3 of 4)

Date:

Mar 2024

Scale:

1:200 @ A0

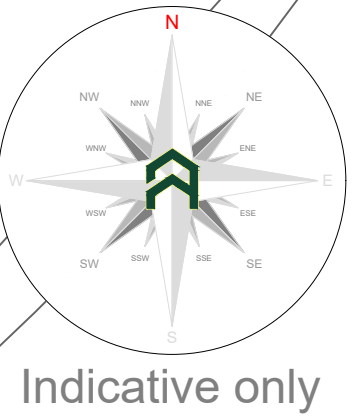
Rev:

TFR

Key:

Tree Nos.	T01	Tree Categories	Trunk	
RPA:		Category 'A' trees	Category 'B' trees	Category 'C' trees
Category 'B' groups		Category 'C' trees	Category 'C' groups	

0m 4m 8m 12m 16m 20m



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<https://arbttech.co.uk> 01244 661170

Project: Coleg Sir Gar, Pibwrlwyd Lane, Carmarthenshire, SA31 2NH

Client: HSP Consulting Engineers Limited

Drawing: Tree Constraints Plan

Based on: 5363

Drawing No: Arbttech TCP 01 (Sheet 4 of 4)

Date: Mar 2024 Scale: 1:200 @ AD

Rev: TFR

Key:

Tree No.:	T01	Tree Categories:	Trunk:	
RPA:		Category 'A' trees:	Category 'B' trees:	Category 'C' trees:
Category 'B' groups:		Category 'C' trees:	Category 'C' groups:	

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9. Document Production Record

Document number	Editor	Signature	Position	Issue number	Date
Arbtech TSR 01	Thomas Ramm	<i>Tom Ramm</i>	Arboricultural Surveyor	01	12/03/24

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