arbtech

Arboricultural Survey to BS5837:2012

Premier Inn Hotels

Premier Inn, Sheffield Barnsley (M1 J36),
Maple Road,
Tankersley,
Barnsley,
S75 3DL

15 May 2024

Emily Kempson BSc (hons), Dip Arb L4 (ABC)

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

Arbtech Consulting Limited (Arbtech) received written instruction on 04 April 2024 from Alexander Parsons on behalf Whitbread Group PLC to attend Premier Inn, Sheffield Barnsley (M1 J36), Maple Road, Tankersley, Barnsley, S75 3DL; grid reference, SK 33599 99093 (site) to undertake an arboricultural survey a 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 Emily Kempson, a Senior Arboricultural Consultant, and hold a BSc honors degree in Geography, a Level 4 Diploma in Arboriculture, and the Lantra Award for Professional Tree Inspection. I hold a Technician grade membership with the Arboricultural Association with professional experience in arboriculture.

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.
Topographical survey drawing	50451_T
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 Emily Kempson on 14 May 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 26No. individual trees and 9No. groups of trees 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
Topographical Survey	Greenhatch Group	50451_T	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 comprises of a Premier Inn hotel with associated restaurant. The hotel is located across the north west of the site, with large expanse of car park to the south east. The landscaping wraps around the majority of the site, with trees growing as boundary screening. There are some younger trees planted within the car park. The topography varies at the site boundary with a slope up from the building to the western boundary, and ditch across the south. The central area of the site is largely flat.

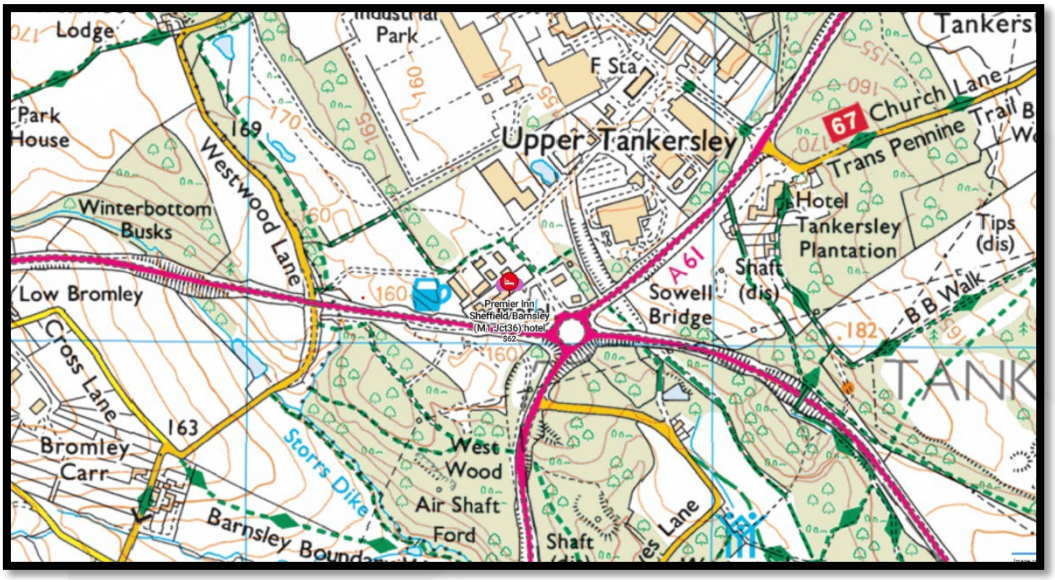


Figure 1: OS Map (Bing Maps)

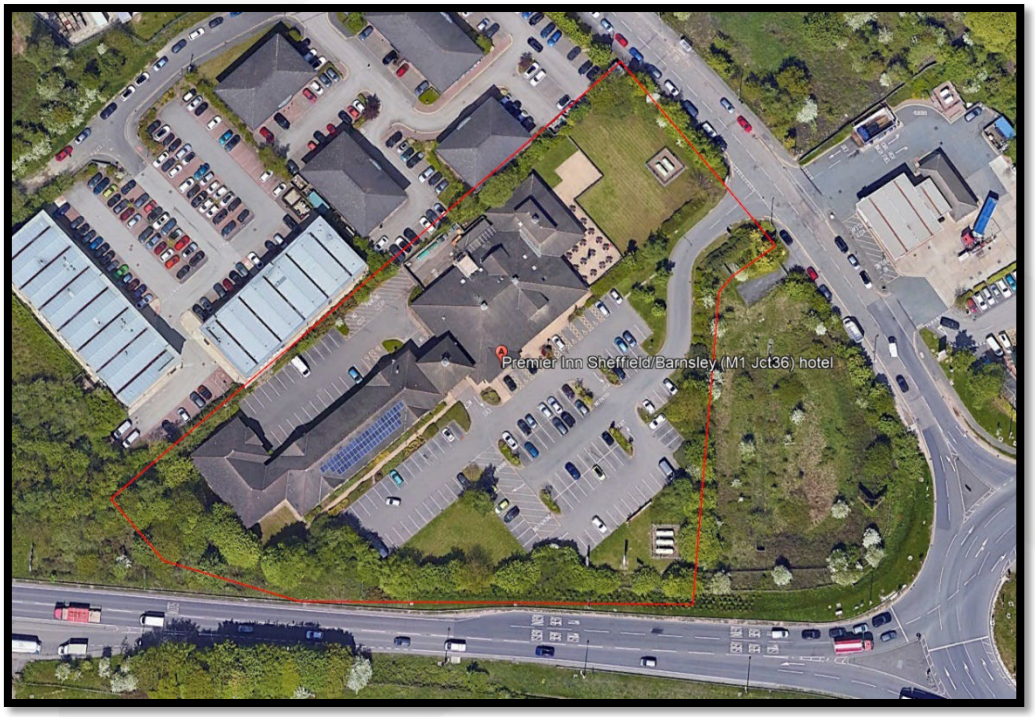


Figure 2: Aerial Image of site with approximate red line boundary (Google Earth)

This content is for educational and informative purposes; parts of it are reproduced with the kind permission of BSI Global.

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 m^2.

Construction Exclusion Zone (also termed Tree Protection Zone)

A construction exclusion or tree protection zone is an area based on the RPA (in m^2), 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

With the benefit of making an assessment of your planning proposals, I 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,

Emily Kempson BSc (Hons), Dip Arb L4 (ABC)
Senior Arboricultural Consultant

07874 872745
Emilykempson@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. *NOTE Category U trees can have existing or potential conservation value which might be desirable to preserve; see 4.5.7.*			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

Appendix 2: Schedule of Trees

BS5837:2012 Tree Survey

Arbtech Consulting Ltd.
Unit 3 Well House Barns
Chester
Cheshire
CH4 0DH
Phone: 01244661170

Client: Premier Inn Hotels
Project: Premier Inn, Sheffield Barnsley (M1 J36), Maple Road, Barnsley
Survey Date: 14/05/2024
Surveyor: Emily Kempson

Tree and Tag No / Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations / Survey Comment	Cat ERC
G1										Estimated Measurements	
Various *See comments for details*	10	1	280	N 6 E 6 S 6 W 6	1 1 1 1	EM	A: 35.5 R: 3.36	Good	C: Good S: Good B: Good	Group of 6 trees with saplings amongst at the top of the slope, species include oak, cherry and field maple. Dimensions represent the maximum of the group.	**B.2** 20+ yrs
G2										Estimated Measurements	
Various *See comments for details*	4	5	50 (Eq)	N 2 E 2 S 2 W 2	0 0 0 0	SM	A: 1.1 R: 0.59	Good	C: Good S: Good B: Good	Shrub group in a raised wall border, 90 cm above ground level. Species include predominantly buddleia and cotoneaster.	**C.2** 10+ yrs
G3										Estimated Measurements	
Various *See comments for details*	10	1	280	N 4 E 4 S 4 W 4	1 1 1 1	EM	A: 35.5 R: 3.36	Good	C: Good S: Good B: Good	Off-site group of trees of a range of size and species. Dimensions denote the maximum for the group. Species include silver birch, field maple, alder, cherry and oak.	**B.2** 20+ yrs
G4										Estimated Measurements	
Various *See comments for details*	14	1	300	N 5 E 5 S 5 W 5	0 0 0 0	M	A: 40.7 R: 3.59	Good	C: Good S: Good B: Good	Boundary group comprising of beech, maple, willow, birch, dense lower storey foliage that has been pruned back from the car park. Dimensions denote maximum for the group. The group grows along varying topography, at both a higher and lower level than the car park due to the slope and ditch along the boundary.	**B.2** 20+ yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B 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 No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
G5										Estimated Measurements	
Various *See comments for details*	7	1	200	N 4 0 E 4 0 S 4 0 W 4 0		EM	A: 18.1 R: 2.4	Good	C: Good S: Good B: Good	Boundary group comprising of beech, maple, willow, birch, with dense shrubbery and foliage within the lower storey. Some of group grows in a ditch by the main road. Dimensions denote the estimated maximum of the group.	**B.2** 20+ yrs
G6										Estimated Measurements	
Various *See comments for details*	5	1	150	N 3 0 E 3 0 S 3 0 W 3 0		SM	A: 10.2 R: 1.8	Good	C: Good S: Not visible B: Not visible	Off-site group of shrubs and young trees. Species include goat willow, buddleia, hawthorn, gorse, mountain ash.	**C.2** 10+ yrs
G7										Estimated Measurements	
Various *See comments for details*	8	1	200	N 4 2 E 4 2 S 4 2 W 4 2		SM	A: 18.1 R: 2.4	Good	C: Good S: Not visible B: Not visible	Off-site group of 3 silver birch. Remote access limits assessment to the crown area only, estimated dimensions.	**B.2** 20+ yrs
G8										Estimated Measurements	
Various *See comments for details*	1.5	1	75	N 0.5 0 E 0.5 0 S 0.5 0 W 0.5 0		SM	A: 2.5 R: 0.89	Good	C: Good S: Good B: Good	Shrub group comprising predominantly of dogwood, laurel, holly. Regularly maintained.	**C.2** 10+ yrs
G9										Estimated Measurements	
Various *See comments for details*	9	1	200	N 4 0 E 4 0 S 4 0 W 4 0		EM	A: 18.1 R: 2.4	Good	C: Good S: Good B: Good	Boundary group comprising of beech, maple, willow, birch, oak, cherry, mountain ash and hawthorn with a dense foliage and shrubbery under storey.	**B.2** 20+ yrs
T1										Estimated Measurements	
Field Maple *Acer campestre*	7	5	305 (Eq)	N 6 0.5 E 5 0.5 S 6 0.5 W 5 0.5		EM	A: 42 R: 3.65	Good	C: Good S: Good B: Good	Growing at increased elevation to building at the top of slope. Multi-stem from 0. 25m with spreading form. Moss covers entirety of stem and scaffold limbs.	**B.2** 20+ yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B 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 No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T2											
Field Maple *Acer campestre*	4	1	90	N 0.5 E 2 S 3 W 1	0.5 0.5 0.5 0.5	Y	A: 3.7 R: 1.08	Fair	C: Fair S: Fair B: Good	Growing within the sloped ground beneath the crown of T1, which has suppressed the growth and form of the stem.	C.2 10+ yrs
T3										Estimated Measurements	
Silver Birch *Betula pendula*	9	1	180	N 3 E 3 S 3 W 3	2 2 2 2	SM	A: 14.7 R: 2.16	Good	C: Good S: Good B: Not visible	Not accessible to inspect due to vegetation and topography.	C.2 10+ yrs
T4											
Silver Birch *Betula pendula*	9	1	300	N 3 E 3 S 3 W 3	2 2 2 2	EM	A: 40.7 R: 3.59	Good	C: Good S: Good B: Good	Located in grass at the top of the slope, slight lean to east.	B.2 20+ yrs
T5											
Field Maple *Acer campestre*	8	3	222 (Eq)	N 6 E 6 S 6 W 6	0.5 0.5 0.5 0.5	EM	A: 22.3 R: 2.66	Good	C: Good S: Fair B: Good	Located on slope. Codominant stem at base, one stem forks again at 0.5m. Juvenile epicormic growth up stems and branches. Moss presence on the bark.	B.2 20+ yrs
T6											
Field Maple *Acer campestre*	8	1	300	N 6 E 6 S 6 W 6	0.5 0.5 0.5 0.5	EM	A: 40.7 R: 3.59	Good	C: Good S: Fair B: Good	Located on slope. Lower stem shows distorted growth before straightening within the mid-upper stem. Juvenile epicormic growth up stems. Moss presence on the bark.	B.2 20+ yrs
T7											
Field Maple *Acer campestre*	8	2	227 (Eq)	N 6 E 6 S 6 W 6	0.5 0.5 0.5 0.5	EM	A: 23.3 R: 2.72	Good	C: Good S: Good B: Good	Located on slope. Stem forks at 0.75m, good union. Deadwood within the lower crown consistent with shading. Moss presence on the bark.	B.2 20+ yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B 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 No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T8											
Field Maple *Acer campestre*	8	2	300 (Eq)	N 6 E 6 S 6 W 6	0.5 0.5 0.5 0.5	EM	A: 40.7 R: 3.59	Good	C: Good S: Good B: Fair	Located on slope. Stem forks at 0.75m with a water filled cup union. Deadwood within the lower crown consistent with shading . Basal cavity to west of 20x40cm with occlusion. Moss presence on the bark.	**B.2** 20+ yrs
T9										Estimated Measurements	
Common Oak *Quercus robur*	12	1	400	N 5 E 5 S 5 W 5	4 3 2 2	M	A: 72.4 R: 4.8	Good	C: Good S: Ivy B: Not visible	Growing in ditch, ivy clad stem obscuring inspection.	**B.2** 20+ yrs
T10											
Silver Birch *Betula pendula*	5	1	190	N 3 E 3 S 3 W 3	2 2 2 2	SM	A: 16.3 R: 2.27	Good	C: Good S: Ivy B: Not visible	Growing in a mown lawn, mechanical damage to structural roots. Ivy obscures the basal area and stem to 1m height. Crown lift wounds partially occluded.	**C.2** 10+ yrs
T11											
Silver Birch *Betula pendula*	11	1	280	N 3.5 E 3.5 S 3.5 W 3.5	2 2 2 2	EM	A: 35.5 R: 3.36	Good	C: Good S: Good B: Good	Growing in mown lawn, minor mechanical damage to 1 structural root 5x10cm. Crown lift wounds occluded. Slight lean to the north east.	**B.2** 20+ yrs
T12											
Staghorn sumac *Rhus typhina*	3	3	105 (Eq)	N 1.5 E 1.5 S 1.5 W 1.5	0.5 0.5 0.5 0.5	Y	A: 5 R: 1.26	Fair	C: Good S: Fair B: Good	Multi stem from base. 1 tear out wound approx. 20cm long, some occlusion.	**C.2** 10+ yrs
T13											
Mountain Ash *Sorbus aucuparia*	2.5	1	70	N 0.5 E 0.5 S 0.5 W 0.5	1.5 1.5 1.5 1.5	Y	A: 2.2 R: 0.83	Good	C: Good S: Good B: Not visible	Growing within a planting border within the car park. Basal area obscured by shrubs.	**C.2** 10+ yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B 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 No	Stems Ø (mm)	Crown Spread (m)		Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T14												
Mountain Ash *Sorbus aucuparia*	3	1	75	N E S W	0.5 0.5 0.5 0.5	1.5 1.5 1.5 1.5	Y	A: 2.5 R: 0.89	Fair	C: Fair S: Good B: Not visible	Growing within a planting border within the car park. Basal area obscured by shrubs. Deadwood throughout the sparse crown.	C.2 10+ yrs
T15												
Lawson Cypress/Chamaecyparis *Chamaecyparis Spp.*	3.5	1	80	N E S W	1 1 1 1	0 0 0 0	Y	A: 2.9 R: 0.96	Good	C: Fair S: Good B: Good	Growing within a planting border within the car park. Dieback to north side of crown.	C.2 10+ yrs
T16												
Mountain Ash *Sorbus aucuparia*	2.5	1	80	N E S W	0.5 0.5 0.5 0.5	1 1 1 1	Y	A: 2.9 R: 0.96	Good	C: Good S: Good B: Not visible	Growing within a planting border within the car park. Basal area obscured by shrubs.	C.2 10+ yrs
T17												
Mountain Ash *Sorbus aucuparia*	2.5	1	75	N E S W	0.5 0.5 0.5 0.5	1 1 1 1	Y	A: 2.5 R: 0.89	Good	C: Fair S: Good B: Not visible	Growing within a planting border within the car park. Basal area obscured by shrubs. Dieback within crown.	C.2 10+ yrs
T18												
Mountain Ash *Sorbus aucuparia*	4	1	110	N E S W	1.5 1.5 1.5 1.5	1 1 1 1	Y	A: 5.5 R: 1.32	Good	C: Good S: Good B: Good	Growing within a mown lawn. Wounding to one branch.	C.2 10+ yrs
T19												
Mountain Ash *Sorbus aucuparia*	4	1	95	N E S W	1.5 1.5 1.5 1.5	1 1 1 1	Y	A: 4.1 R: 1.14	Good	C: Good S: Good B: Good	Growing within a mown lawn. Mechanical damage to lower stem.	C.2 10+ yrs

Age Classifications: N Newly planted; EM Early Mature; Y Young; M Mature; SM Semi-mature; OM Over Mature

Condition: C Crown; S Stem; B 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 No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T20											
Mountain Ash *Sorbus aucuparia*	4	1	80	N 1.5 E 1.5 S 1.5 W 1.5	1 1 1 1	Y	A: 2.9 R: 0.96	Good	C: Good S: Good B: Good	Growing within a mown lawn.	C.2 10+ yrs
T21											
Silver Birch *Betula pendula*	6	1	170	N 3 E 3 S 3 W 3	2 2 2 2	SM	A: 13.1 R: 2.04	Good	C: Good S: Good B: Good	Growing within a mown lawn. Birds nest in crown.	C.2 10+ yrs
T22										Estimated Measurements	
Common Oak *Quercus robur*	12	1	400	N 6 E 6 S 6 W 6	2 2 2 2	M	A: 72.4 R: 4.8	Good	C: Good S: Good B: Good	Growing within the drainage ditch, not accessible for a full inspection.	B.1.2 20+ yrs
T23										Estimated Measurements	
Goat Willow *Salix caprea*	13	4	600 (Eq)	N 7 E 7 S 7 W 7	4 4 4 4	M	A: 162.9 R: 7.2	Good	C: Good S: Not visible B: Not visible	Growing within the shrubbery which obscures the stem to 1.5m height. Multi stem at 1.5m into 4 codominant stems. The crown is in contact with the two adjacent buildings.	B.2 20+ yrs
T24											
Silver Birch *Betula pendula*	6	2	297 (Eq)	N 3 E 3 S 3 W 3	1.5 1.5 1.5 1.5	SM	A: 39.9 R: 3.56	Good	C: Good S: Good B: Not visible	Shrubbery around the base obscures the stem up to 1m height. The stem forks at 1.5m; the dominant forks again with an included union.	B.2 20+ yrs
T25										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	7	1	180	N 3 E 3 S 3 W 3	1.5 1.5 1.5 1.5	SM	A: 14.7 R: 2.16	Good	C: Good S: Not visible B: Not visible	Shrubbery around the base obscures the stem up to 1m height.	C.2 10+ yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

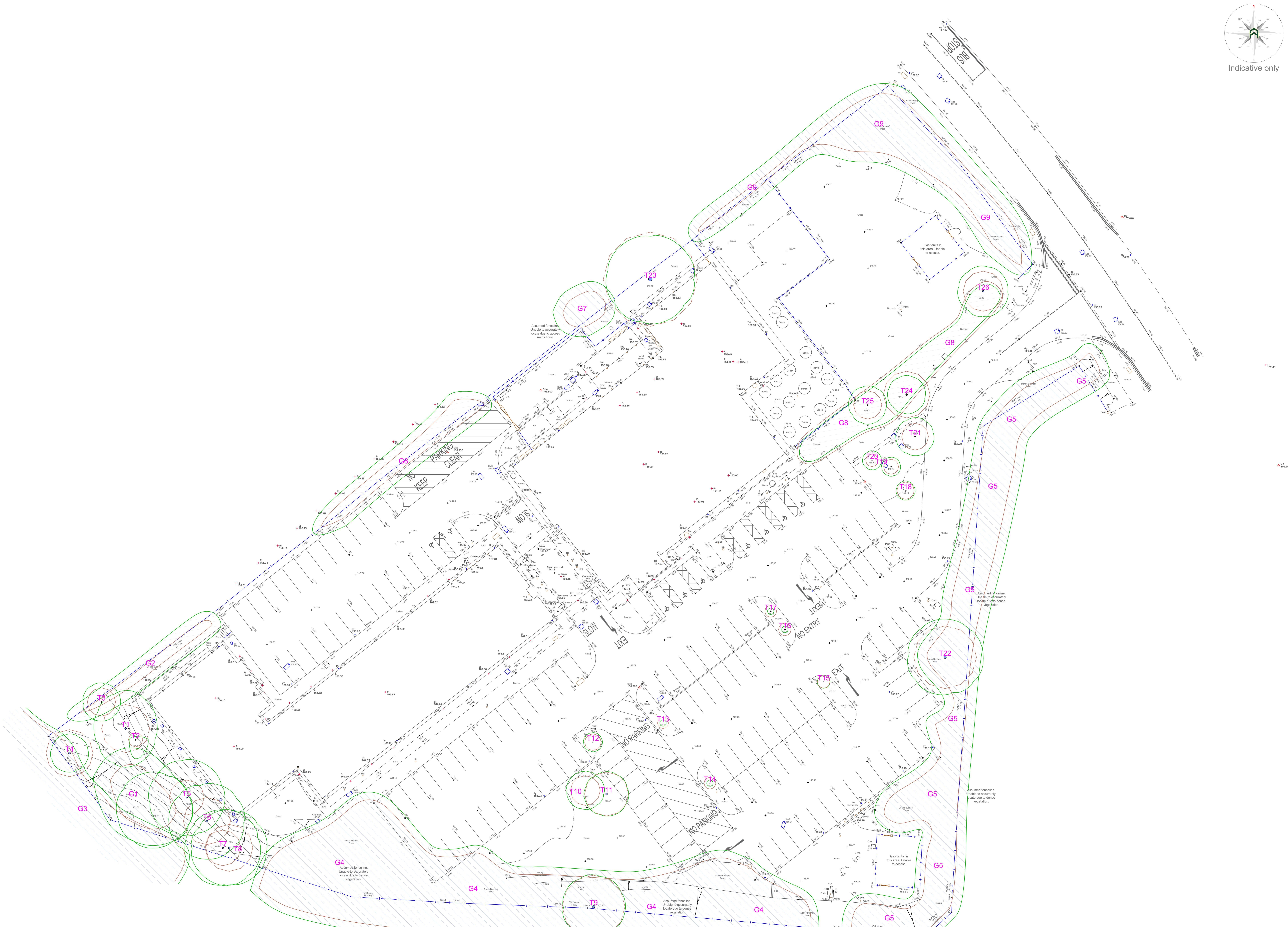
Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contributio

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T26											
Common Oak *Quercus robur*	9	2	256 (Eq)	N 4 E 4 S 4 W 4	1 1 1 1	EM	A: 29.7 R: 3.07	Good	C: Good S: Good B: Not visible	Shrubbery around the basal area obscures the stem up to 1m height. Apparent codominant stem, fork not visible.	**B.1.2** 20+ 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

Appendix 3: Tree Constraints Plan



Note: Existing dwelling(s), retaining wall(s), road(s) and structures are likely to be partial or complete root barriers. We currently do not have enough information with regards to the existing and surrounding properties and structures, foundations, soil types etc. to definitively determine the root barriers. Site features that are significant enough to be considered barriers to root development, irrespective of proximity to trees, have been identified with a light blue hatch (see key for details).

0m 1m 3m 5m 10m 15m 20m

Tree Categories

Trees are categorised in accordance with the cascade chart in Table 1 of the British Standard BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'

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

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

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

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 Arbtech 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).

arbtech

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

Project:
Premier Inn, Sheffield Barnsley (M1 J36),
Maple Road,
Tankersley,
Barnsley,
S75 3DL

Client:
Premier Inn Hotels

Drawing:
Tree Constraints Plan

Based on:
50451_T

Drawing No:	Rev:
Arbtech TCP 01	

Date:	Scale:	Drawn:
May 2024	1:200 @ A0	EK

Key:

Tree Nos.:	T1	Tree Canopies:		Trunks:	
RPAs:		Category 'B' trees:		Category 'B' groups:	
Category 'C' trees:		Category 'C' groups:			

All dimensions should be checked on site. No dimensions are to be scaled from this drawing.
Please notify us of any discrepancies found. Arbtech Consulting Ltd. cannot be held responsible for inaccuracies in the base drawing in which this plan is based.
This drawing is designed to reflect the principles of the layout or design only, and relates only to the protection of retained trees.
This drawing is not to be read as a definitive part of the engineering or construction designs or method statement. An architect or structural engineer should be contacted over any matters of construction, detailing or specification and for any standards or regulatory requirements relating to proposed structures, hard surfacing or underground services.
This drawing was produced in colour - a monochrome copy should not be relied upon.

9. Document Production Record

Document number	Editor	Signature	Position	Issue number	Date
Arbtech TSR 01	Emily Kempson		Senior Consultant	01	15/05/24

Limitations

Arbtech Consulting Ltd has prepared this report for the sole use of the above-named Client/Agent in accordance with our terms of business, under which our services were performed. No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us. This report may not be relied upon by any other party without the prior and express written agreement of Arbtech Consulting Ltd. The assessments made assume that the sites and facilities will continue to be used for their current purpose without significant change. The conclusions and recommendations contained in this report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from third parties has not been independently verified by Arbtech Consulting Ltd.

Copyright