



Arboricultural Impact Assessment

**of Proposed Construction of Orangery, Additional Car
Parking Bays, and Refuse and Cycle Storage Area at**



**Cherry Tree House, Preston Old Road,
Blackburn, Lancashire, BB2 5NU**

Prepared by:

Bowland 
Tree Consultancy Ltd

September 2015

**ARBORICULTURAL IMPACT ASSESSMENT
CHERRY TREE HOUSE, BLACKBURN**

Control sheet

Project No.: BTC935

Site: Cherry Tree House, Preston Old Road, Blackburn

Agent for Client: JEI Ltd

Council: Blackburn with Darwen Borough Council

Survey Date: 26 August 2015

Report Prepared by: Kendall Rigg HND Tech ArborA

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Contact Details

Bowland Tree Consultancy Ltd
7 Lakeland Close
Billington
Lancashire
BB7 9LN

T: 01254 825098
E: info@bowlandtreeconsultancy.co.uk

DISCLAIMER

Survey Limitations: Unless otherwise stated all trees are surveyed from ground level using non-invasive techniques, in sufficient detail to gather data for and inform the design of the current project only. The disclosure of hidden crown and stem defects, in particular where they may be above a reachable height or where trees are ivy clad or located in areas of restrictive ground vegetation, cannot therefore be expected. Detailed tree safety appraisals are only carried out under specific written instructions. Comments upon evident tree safety relate to the condition of said tree at the time of the survey only. Unless otherwise stated all trees should be re-inspected annually in order to appraise their on-going mechanical integrity and physiological condition. It should, however, be recognised that tree condition is subject to change, for example due to the effects of disease, decay, high winds, development works, etc. Changes in land use or site conditions (e.g. development that increases access frequency) and the occurrence of severe weather incidents are also significant considerations with regard to tree structural integrity, and trees should therefore be re-assessed in the context of such changes and/or incidents and inspected at intervals relative to identified and varying site conditions and associated risks.

Where trees are located wholly or partially on neighbouring private third-party land then said land is not accessed and our inspection is therefore restricted to what can reasonably be seen from within the site. Stem diameters and other measurements of trees located on such land are estimated. Any subsequent comments and judgments made in respect of such trees are based on these restrictions and are our preliminary opinion only. Recommendations for works to neighbouring third-party trees are only made where a potential risk to persons and/or property has been identified during our survey or, if applicable, where permissible works are required to implement a proposed development. Where significant structural defects of third-party trees are identified and associated management works are considered essential to negate any risk of harm and/or damage then we will inform the relevant Council of the matter. Where a more detailed assessment is considered necessary then appropriate recommendations are set out in the Tree Survey Schedule.

Where tree stem locations are not included on the plan(s) provided then they are plotted by the arboriculturist at the time of the survey using, where appropriate and/or practicable, a combination of measurement triangulation and GPS co-ordination. Where this is not possible then locations are estimated. Restrictions in these respects are detailed in the report.

This document is intended as a guide to identify key tree related constraints to site development only, and the potential influence of trees upon existing or proposed buildings or other structures resulting from the effects of their roots abstracting water from shrinkable load-bearing soils is not considered herein. The tree survey information in its current form should not therefore be considered sufficient to determine appropriate foundation depths for new buildings. Accordingly, an updated survey, with reference to the current NHBC Standards Chapter 4.2 - Building Near Trees, must therefore be prepared for the specific purpose of informing suitable foundation depths subsequent to planning approval being granted. The advice of a structural engineer must also be sought with regard to appropriate foundation depths for new buildings.

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**ARBORICULTURAL IMPACT ASSESSMENT
CHERRY TREE HOUSE, BLACKBURN**

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1.0 INTRODUCTION

Terms of Reference

- 1.1 Bowland Tree Consultancy Ltd were instructed to:
- Survey, either as individuals or by group, all trees having reasonable potential to affect or to be adversely affected by development of the site under consideration;
 - Prepare a tabulated Tree Survey Schedule based on guidance specified BS5837:2012 - Trees in Relation to Design, Demolition and Construction – Recommendations;
 - Evaluate the potential tree related impacts and design conflicts of the proposals;
 - Advise on removal, retention and management options for the trees in the current context and in the context of the proposed development;
 - Advise on suitable tree protection measures required during development;
 - Annotate the existing site plan to produce a Tree Constraints Plan and the proposal plan to produce a Tree Impact Plan identifying tree retention categories, crown spreads, Root Protection Areas, projected tree related impacts, and other pertinent details; and
 - Produce an Arboricultural Impact Assessment report outlining the main tree related issues and reasonably foreseeable tree related impacts in relation to the proposed development and indicating suitable mitigation provisions and retained tree protection measures.

Scope and Purpose of Report

- 1.2 By detailing foreseeable tree related issues this report is intended to assist the Local Planning Authority (LPA), in this case Blackburn with Darwen Borough Council, in their review of the proposed development and, as such, should be supplied to them in support of the planning application to which it pertains.
- 1.3 Essentially, the report provides an analysis of the impacts that the proposed development is projected to have on trees located both within the site and, where practicable, on land immediately adjacent to its boundaries. It also offers guidance on suitable retained tree management and mitigation for projected losses, along with advice on appropriate tree protection measures in the context of the proposed development in accordance with current guidance.

Site Visit, Data Collection and Tree Plans

- 1.1 Further to our instruction I confirm that I carried out a tree survey on 26 August 2015. The survey was carried out in accordance with the preceding disclaimer, and all tree data collected on site is set out in the attached tabulated Tree Survey Schedule (TSS) at Appendix One which, for ease of interpretation, should be read alongside the associated BS5837:2012 Table 1 (as appended).
- 1.2 The survey identified seven individual trees (prefixed 'T'), three groups of trees (prefixed 'G') and five hedges (prefixed 'H'), which have been numbered accordingly on the Tree Constraints Plan (TCP) and Tree Impact Plan (TIP), as appended. The TCP details the existing site, with readily definable tree constraints, whilst the TIP also has an overlay of the development proposals detailing associated tree impacts, retention proposals, and other pertinent information.
- 1.3 The TIP is based on an ordnance survey based site proposal plan that was provided in electronic format by the project's agent, JEI Ltd, and, for the purpose of this report, I presume the provided plan's details to be accurate.

2.0 STATUTORY PROTECTION IN RESPECT OF TREES AND ASSOCIATED WILDLIFE

Tree Preservation Orders and Conservation Area Designations

- 2.1 The Town & Country Planning Act (1990) (the Act) and associated Regulations empower Local Planning Authorities (LPAs) to protect trees in the interests of amenity by making Tree Preservation Orders (TPOs). The Act also affords protection for trees of over 75 mm diameter that stand within the curtilage of a Conservation Area (CA). Subject to certain exemptions, an application must be made to the LPA in question to carry out works upon or to remove trees that are subject to a TPO, whilst six weeks' notice of intention must be given to carry out works upon or to remove trees within a CA that are not protected by a TPO.
- 2.2 According to the Blackburn with Darwen Borough Council (BwDBC) planning department website the site itself does not stand within a CA. JEI Ltd have however provided us with documentation showing that 9 trees on the site are covered by the BwDBC - 'The Woodlands' TPO 2002 and as such written approval would need to be obtained from BwDBC prior to scheduling or carrying out any tree works that are not related directly to the implementation of a detailed planning approval.

Protected Species

- 2.3 Nesting birds are afforded statutory protection under the Wildlife & Countryside Act (1981) (as amended) and their potential presence should therefore be considered when clipping hedges, removing climbing plants and pruning and removing trees. The breeding period for woodlands runs from March to August inclusive. Hedges provide valuable nesting sites for many birds and clipping should therefore be avoided during March to July. Trees, hedges and ivy should be inspected for nests prior to pruning or removal and any work likely to destroy or disturb active nests should be avoided until the young have fledged.
- 2.4 All bat species are protected under Schedule 5 of the Wildlife & Countryside Act (1981) (as amended) and under Schedule 2 of the Conservation of Habitats and Species Regulations 2010 (as amended). In this respect it should be noted that it is possible that unidentified bat habitat features may be located high up in tree crowns and all personnel carrying out tree works at the site should therefore be vigilant and mindful of the possibility that roosting bats may be present in trees with such features. If any bat roosts are identified then it is essential that works are halted immediately and that a suitably qualified and experienced ecologist investigates and advises on appropriate action(s) prior to works continuing.

Felling Licences

- 2.5 Subject to certain exemptions the Forestry Act (1967) requires that a 'Felling Licence' be obtained to remove growing trees amounting to more than five cubic metres of timber in a calendar quarter. Felling Licences are administered by the Forestry Commission and contravention of the associated controls can incur substantial penalties.
- 2.6 A felling licence is, however, not required for the felling of trees immediately required for the removal of trees located within a residential garden or for the purpose of carrying out development authorised by a full planning permission granted under the Town and Country Planning Act 1990, or for the removal of trees with a private residential garden, as is the case at the site under consideration.

3.0 THE SITE AND THE SURROUNDINGS

- 3.1 The site under consideration is located approximately three kilometres to the south-west of Blackburn town centre, within the administrative boundaries of Blackburn with Darwen Borough Council (BwDBC). The site currently consists of a detached property set in its own grounds, with an existing driveway entrance on the south-east boundary. The southern and western boundaries are screened by high hedges with a shorter hedge running along the northern boundary. There is a large parking area to the south with the driveway also continuing along the eastern boundary to an area of hard standing and storage space (see TIP).
- 3.2 The site is bordered to the north and east by residential properties, to the south by Preston Old Road and to the west by Woodlands Avenue. Topography within the site is relatively level with a slight rise in ground levels towards the house from all four sides.

4.0 THE TREE POPULATION

- 4.1 As noted previously, seven individual trees, three groups of trees and five hedges were surveyed for the purpose of this appraisal. The surveyed trees consist of a mix of deciduous broadleaf species and evergreen coniferous species, including Beech, Sycamore, Silver Birch, Holly, Leyland Cypress and Privet.
- 4.2 The surveyed trees range from young to post-mature in age, with heights of up to 15 metres, maximum diametrical crown spreads of up to 18 metres and stem diameters of up to 690 millimetres. Detailed tree dimensions and other pertinent information, such as structural defects and physiological deficiencies, are included in the Tree Survey Schedule (TSS) at Appendix One.
- 4.3 There are individual trees and groups of trees of various species, ages and sizes located around the site, with the more mature trees (i.e. T1, T3 and T5) being located along the southern and western boundaries where they provide a valuable screen for the property as well as contributing to the wider visual amenity of the locality (see Fig. 1, below).
- 4.4 In contrast, to the north-east of the property there is a very closely spaced group of two trees and a further hedge (i.e. G1 and H4), both of which are internal to the site and, as such, confer a negligible visual amenity in the local landscape (see Fig. below).



Fig 1: Mature Sycamore tree T5, to centre, growing within the southern boundary hedge alongside Preston Old Road



Fig 2: Looking east along the northern boundary, with group G3 to centre

- 4.5 In respect of the tree survey it should be noted that tree quality is categorised within the

existing context without taking any site development proposals into account. However, recommendations for works included in the TSS take both current site usage into consideration and the proposed site development where there are definable development related issues with regard to specific trees.

- 4.6 The TSS includes a column ('Cat. Grade') listing the trees' respective retention values, where they are rated either 'A', 'B', 'C' or 'U', as per BS5837:2012 Table 1 (Appendix One). 'A' category trees are those considered to be of 'high quality' and, accordingly, the most suitable for retention, whilst 'B' category trees are those considered to be of 'moderate quality', and 'C' category trees are those considered to be of 'low quality' with a correlated low retention value. In turn, 'U' category trees are those that are considered to be 'unsuitable for retention'.
- 4.7 As detailed in Table A, below, one tree was categorised as moderate quality ('B'), four trees, two groups and five hedges were categorised low quality ('C'), and two trees and one group were categorised as unsuitable for retention (i.e. 'U' category).

Table A: BS5837-2012 Retention Categories of the Surveyed Trees

	Ret. Cats.	Tree/Group/Hedge Numbers	Totals
Those of a moderate or high quality that should be afforded appropriate consideration in the context of development	'A'	-	-
	'B'	T3	1 Tree
Those of a low quality that should not be considered a material constraint to development	'C'	T1, T2, T5, T7, G2, G3, H1, H2, H3, H4, H5	4 Trees 2 Groups 5 Hedges
Those that should be removed for sound management reasons regardless of site proposals	'U'	T4, T6, G1	2 Trees 1 Group
			= 7 Trees, 3 Groups & 5 Hedges in Total

5.0 THE DEVELOPMENT PROPOSAL AND ITS PROJECTED ARBORICULTURAL IMPACTS

- 5.1 I am informed, by the client's agent, JEI Ltd, that the planning application is for the construction of an orangery adjacent to the north-eastern corner of the existing property with additional parking and a refuse and cycle storage area to the east.
- 5.2 Accordingly, I have been provided with a proposal plan to that effect, as prepared by JEI Ltd, and, in order to appraise the projected impacts that the development would potentially have on the trees, the tree constraints were overlaid onto the site proposal plan, as detailed on the TIP.

Projected Arboricultural Losses Relating to the Proposal

- 5.3 As detailed in Table B, overleaf, implementation of the proposed development as it stands is projected to require the removal of one low quality (i.e. 'C' category) group and two low quality hedges. In addition, two trees and one group which are considered unsuitable for retention (i.e. 'U' category) are also suggested for removal in the context of the development proposals.
- 5.4 Nonetheless, I would emphasise that both the group (comprised of two trees, one of which is self-set and the other has evidently been heavily reduced in the past with four primary leaders emerging from the reduction point) and the hedges that will require removal are of a low quality and are located internal to the site, whereby they have very limited visibility in the wider landscape.

- 5.5 Additionally, the better quality tree and all of the larger trees located around the site, including the highly visible trees bordering the two road frontages, are proposed for retention.
- 5.6 As such, the removal of the trees in question is projected to have a very limited impact on the visual amenity of the locality, with the retained trees ensuring that the proposed development remains screened from the public highway

Table B: Arboricultural Impacts of Proposed Development & Other Tree Removal Proposals

	Ret. Cats.	Removals necessary to implement development	Removals suggested for non-development related reasons	Total no. of tree removals
Those of a high quality that should be afforded appropriate consideration in the context of development	'A'	-	-	-
Those of a moderate quality that should be afforded appropriate consideration in the context of development	'B'	-	-	-
Those of a low quality that should be afforded appropriate consideration in the context of development	'C'	G3 H4, H5	-	1 Group 2 Hedges
Those that should be removed for sound management reasons regardless of plans	'U'	-	T4, T6 G1	2 Trees 1 Group
Totals		1 Group 2 Hedges	2 Trees 1 Group	= 2 Trees, 2 Groups & 2 Hedges in Total

Mitigation for Projected Tree Losses as Part of Site Landscaping

- 5.7 Replacement tree planting with species that grow to be moderate in size is proposed in various locations around the site, including close to the southern and western boundaries next to the adjacent roads, and in the north-east of the site. New hedge planting is also proposed along the northern boundary, with hedge H3 increased in length to mitigate for the loss of hedge H4.
- 5.8 Overall, in consideration of the above, it is anticipated that the proposed development can accommodate a number of new trees as part of site landscaping, as per the suggested locations indicated on the appended TIP, which, in turn, is projected to sufficiently mitigate for the necessary tree losses.
- 5.9 In turn, the provision of the new tree planting can be guaranteed through the imposition of a suitably worded landscape condition attached to a planning approval.

6.0 RECOMMENDATIONS FOR SUCCESSFUL TREE RETENTION IN THE CONTEXT OF DEVELOPMENT

Root Protection Areas and Construction Exclusion Zones

- 6.1 Adequate protection of the Root Protection Areas (RPAs) of retained trees during construction is essential if their long-term viability is to be assured. RPAs, which are calculated through a method provided in BS5837:2012, are ground areas that should be protected by temporary protective fencing as Construction Exclusion Zones (CEZs) throughout the development process, thereby keeping the trees' root zones free from disturbance. Consequently, the RPA distances, as detailed in the TSS (see 6.2), and on the TIP give an idea of the on-site below-ground constraints in respect of tree roots and assist in planning for appropriate tree retention in relation to feasible development.

- 6.2 The TSS includes two columns listing the RPAs of the individually surveyed trees and, where applicable, the largest of the trees in any surveyed groups as overall areas in square metres and as radial distances. The radial RPAs are indicated as magenta coloured circles on the TIP. With regard to CEZs the design, materials and construction of the fencing should be appropriate for the intensity and type of site construction works, should conform to at least section 6.2 of BS5837:2012, and should be secured by the imposition of a suitably worded planning condition. A default Temporary Protective Fencing Specification is included at Appendix Two.

Arboricultural Method Statement and Tree Protection Plan

- 6.3 Government guidance recommends that, where considered expedient by the LPA, an Arboricultural Method Statement (AMS) and a Tree Protection Plan (TPP) be prepared detailing special mitigation construction. Essentially, the AMS and TPP describe and detail the procedures, working methods and protective measures to be used in relation to retained trees in order to ensure that they are adequately protected during the construction process.
- 6.4 In order to ensure that any such special working methods are followed, and that the retained trees are adequately protected throughout the development process, the production of and adherence to an AMS and TPP can be conditioned to a planning approval.

7.0 OTHER RECOMMENDATIONS

Non-Development Related Tree Works and Recommendations

- 7.1 Any general management pruning works for retained trees that are stated to be non-development related, as detailed in the TSS, are recommended in accordance with prudent arboricultural management and should therefore be carried out regardless of any site development proposals and potential changes in land usage. All tree works should be carried out in accordance with BS3998:2010 - Tree Work – Recommendations.

Tree Work Related Consents

- 7.2 No tree pruning or removal works should commence on site until necessary consents have been obtained from the LPA as part of a planning approval or in respect of any statutory tree protection (e.g. TPOs).

Arboricultural Contractors

- 7.3 All tree works should be carried out by suitably qualified and experienced arboricultural contractors carrying appropriate public liability insurance cover and be implemented to the minimum current CE and UK industry standards and in accordance with industry codes of practice. Only certificated personnel should, in accordance with The Control of Pesticides Regulations, apply any pesticides.

Contractors and Subsequently Identified Tree Defects

- 7.4 Tree contractors should be made aware that, should any significant tree defects become apparent during operations that would not have been immediately obvious to the surveyor, then such defects should be notified immediately to the client and subsequently confirmed to the consultant within five working days.

New Tree Planting

- 7.5 All tree planting at the site should be carried out in accordance with BS8545:2014 Trees: from nursery to independence in the landscape – Recommendations.

Retained Tree Management

- 7.6 Any tree risk management appraisals and subsequent recommendations made in this report were based on observations and site circumstances at the time of our survey. Trees are dynamic living organisms whose structure is constantly changing and even those evidently in good condition can succumb to damage and/or stress.
- 7.7 In this respect I would note that, under the Occupiers' Liability Act (1957 & 1984), site occupants have a duty of care to take reasonable steps to prevent or minimise the risk of personal injury and/or damage to property from any tree located within the curtilage of the land they occupy. It is accepted that these steps should normally include commissioning a qualified and experienced arboriculturist to survey their trees in order to identify any risk of harm to persons or damage to property that they may present and, where unacceptable risks are identified, taking suitable remedial action to negate those risks.

8.0 SUMMARY AND CONCLUSIONS

- 8.1 The site under consideration is a detached property with gardens located approximately three kilometres to the south-west of Blackburn town centre.
- 8.2 Seven individual trees, three groups of trees and five hedges were surveyed in respect of a proposal for the construction of an orangery adjacent to the north-eastern side of the existing property, with additional car parking and a refuse and cycle storage area to the east.
- 8.3 One tree was allocated a moderate retention value, four trees, two groups and five hedges were allocated low retention values, and two trees and one group was categorised as unsuitable for retention.
- 8.4 An evaluation of the proposed development, in the context of the existing site, has indicated that it will be necessary to remove one low quality group and two low quality hedges.
- 8.5 Nonetheless, I would emphasise that both the group and the hedges that will require removal are of low quality, and are located internal to the site whereby they have limited visibility in the wider landscape.
- 8.6 Additionally, the moderate quality tree, along with all of the larger trees located around the site boundaries, including the highly visible trees bordering the two road frontages, are proposed for retention.
- 8.7 As such, the removal of the trees in question is projected to have a very limited impact on the visual amenity of the locality, with the retained trees ensuring that the site remains screened from the public highway.
- 8.8 I would also note that the site can accommodate new tree and hedge planting, which is consequently projected to sufficiently mitigate for the necessary losses.
- 8.9 In turn, the provision of the new tree planting can be guaranteed through the imposition of a suitably worded landscape condition attached to a planning approval.
- 8.10 In consideration of the above findings I therefore conclude that, from the details provided to

date, the site in question can be developed as proposed whilst retaining all of the existing roadside boundary trees, in particular those that are considered the most important in visual terms, and that, although two low value trees will require removal, the loss of these trees can be adequately mitigated for with the replacement planting of a number of trees, of a suitable growing size and species, across the site.

- 8.11 However, in order to ensure successful existing tree preservation over the long-term, it is essential that the retained trees are protected in strict accordance with current Government guidance and the recommendations included herein.
- 8.12 Accordingly, the provision of and adherence to a suitably detailed Arboricultural Method Statement and Tree Protection Plan can be conditioned to a planning permission in order to ensure the protection of retained trees.

REFERENCES

- BS8545:2014 - Trees: From Nursery to Independence in the Landscape – Recommendations. BSI British Standards, London.
- BS3998:2010 - Tree Work - Recommendations. BSI British Standards, London.
- BS5837:2012 - Trees in Relation to Design, Demolition and Construction – Recommendations. BSI British Standards, London.
- National House Building Council (2008). NHBC Standards Chapter 4.2 - Building Near Trees. NHBC, Amersham.
- National Joint Utilities Group (2007). Volume 4: NJUG Guidelines For The Planning, Installation And Maintenance Of Utility Apparatus In Proximity To Trees (Issue 2) – Operatives Handbook.

APPENDICES



TREE SURVEY SCHEDULE FOR ARBORICULTURAL IMPACT ASSESSMENT	
Site:	Cherry Tree House, Preston Old Road, Blackburn, Lancashire, BB2 5NU
Agent for Client:	JEI Ltd

Surveyor:	Kendall Rigg HND TechArborA
Survey Date:	26 August 2015
Job Ref:	BTC935

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No.	Species	Height	Stem Diam.	Branch Spread	Branch & Canopy Clearances	Life Stage	PC	General Observations and Comments	Management Recommendations	ERC	Cat. Grade	RPA (m ²)	RPA Radius (m)
T1	Copper Beech	12.5	670	N E S W 3 6 6 7	3-W 3	M	G	<ul style="list-style-type: none"> Located 1m to the west of western gatepost and growing in contact with an approximately 1.3m high metal pole and rail boundary fence to south. 100mm diameter <i>Ganoderma appplanatum / australe</i> (white rot decay fungi) fungal fruiting body at northern stem base. Bifurcates at a height of approximately 3.5m. Crossing and rubbing branches up to 100mm diameter within crown. Crown suppressed to north due to presence of neighbouring tree. 	<ul style="list-style-type: none"> Retain in context of proposed development. Ensure protection of Root Protection Area (RPA) throughout development works. Monitor physiological and structural condition. 	10+	C1/2	203	8.04
T2	Copper Beech	12.5	580	N E S W 5 10 2 8	2.5-E 3	M	G	<ul style="list-style-type: none"> Bifurcates at a height of approximately 3m with an acutely tight fork and an included bark union formation that is evident to approximately 850mm below union. Western primary leader has a growth angle of approximately 45°. Eastern primary leader has a growth angle of approximately 30°. 150mm diameter pruning wound cavity with evident inward decay on south side of eastern primary leader approximately 1m from union. 	<ul style="list-style-type: none"> Retain in context of proposed development. Ensure protection of RPA throughout development works. 	10+	C1/2	152	6.96
T3	Sycamore	14	470	N E S W 6 5 3 5	2-N 3	EM	G	<ul style="list-style-type: none"> 90mm diameter basal sucker growth at eastern base of stem. Crown suppressed to south due to presence of neighbouring tree. 	<ul style="list-style-type: none"> Retain in context of proposed development. Ensure protection of RPA throughout development works. 	20+	B1/2	100	5.64
T4	Hawthorn	6.5	220	N E S W 6 1 0 1	0.1-N 3	PM	P	<ul style="list-style-type: none"> Collapsed primary leader growing from an old decaying stump. Short projected remaining life expectancy. 	<ul style="list-style-type: none"> Remove due to short projected remaining life expectancy. Replace with tree of species that grows to moderate size (e.g. Fastigate Hornbeam or Liquidamber) on southern boundary. 	<10	U	22	2.64
T5	Sycamore	14	690	N E S W 6 5 5 5	2-W 4	M	M/G	<ul style="list-style-type: none"> Growing in contact with southern boundary wall. Previously heavily reduced to a height of approximately 5m, with multiple primary leaders emerging from reduction points with tight forks evident at unions. 	<ul style="list-style-type: none"> Retain in context of proposed development. Ensure protection of RPA throughout development works. 	10+	C2	215	8.28

Headings and Abbreviations:

No.	Allocated sequential reference number - Tree (T), Group (G), Woodland (W) or Hedge (H) reference number - refer to plan and to numbered tags where applicable
Species:	Common name
Height:	In metres, to nearest half metre – where possible approximately 80% are measured using an electronic clinometer and the remainder estimated against the measured trees. In the case of Groups and Woodlands the measurement listed is that of the highest tree
Stem Diam.:	Stem diameter in millimetres, to nearest 10mm - measured and calculated as per Annex C of BS5837:2012. MS = multi-stemmed, TS = twin-stemmed
Branch Spread:	Crown radius measured (or estimated where considered appropriate) from the four cardinal points (north, east, south and west) to give an accurate visual representation of the crown
Branch & Canopy Clearances:	Existing height above ground level, in metres, of first significant branch and direction of growth (e.g. 2.5-N) and of canopy at lowest point – to inform on crown to height ratio, potential for shading, etc.
Life Stage:	Estimated age class - Y = young, SM = semi-mature, EM = early-mature, M = mature, PM = post-mature
PC:	Physiological Condition - a measure of the tree(s)' overall vitality, i.e. D = Dead, MD = Moribund, P = Poor, M = Moderate, G = Good
General Observations and Comments:	Comments relating to the tree(s)' overall condition and any other pertinent factors including structural defects, current and potential direct structural damage, physiological decline, poor form, etc.
Management Recommendations:	Either Preliminary or In Consideration of the Proposal - In the case of Arboricultural Constraints Surveys the recommended management works only take existing site and tree circumstances and conditions into account and not proposed developments. Arboricultural Impact Assessment and Method Statement related Surveys take the proposed development into consideration with recommendations made accordingly. More than one option may be given if considered appropriate
ERC:	Estimated Remaining Contribution - in years as per BS5837:2012 (i.e. <10, 10+, 20+, 40+)
Cat. Grade:	Category Grading - tree retention value listed as U, A, B or C - in accordance with BS5837:2012 Table 1
RPA m²:	Root Protection Area in m ² - calculated area around the tree that must be appropriately protected throughout the development process in order avoid root damage
RPA Radius (m):	Root Protection Area Radius - in metres measured from the centre of the stem to the line of tree protection
# (Estimated Dimensions):	Where trees are located off-site, or are inaccessible for any other reason, and accurate measurements or other information cannot be taken then the information provided is estimated and is duly suffixed with a "#" symbol

TREE SURVEY SCHEDULE FOR ARBORICULTURAL IMPACT ASSESSMENT	
Site:	Cherry Tree House, Preston Old Road, Blackburn, Lancashire, BB2 5NU
Agent for Client:	JEI Ltd

Surveyor:	Kendall Rigg <small>HND TechArborA</small>
Survey Date:	26 August 2015
Job Ref:	BTC935

No.	Species	Height	Stem Diam.	Branch Spread	Branch & Canopy Clearances	Life Stage	PC	General Observations and Comments	Management Recommendations	ERC	Cat. Grade	RPA (m ²)	RPA Radius (m)
T6	Silver Birch	13.5	350	N E S W	2 1 3 3	2-E 4	EM P	<ul style="list-style-type: none"> 2m long occluded stem fracture from eastern base of stem. Reaction rib from northern base of stem curving around and up to the south-east side of the stem at a height of approximately 2m. Trifurcates at a height of 2m with very tight forks and included bark unions. Eastern primary leader has been heavily constricted by a washing line with crown above dying back. Die-back evident within northern primary leader crown. 	<ul style="list-style-type: none"> Remove due to short projected remaining life expectancy. Replace with tree of species that grows to moderate size (e.g. Fastigate Hornbeam or Liquidamber) towards south-west corner. 	<10	U	55	4.2
T7	Sycamore	15	1x510 1x270 (ts)	N E S W	5 6 6 6	1-NE 3	M M	<ul style="list-style-type: none"> 270mm diameter secondary leader at a height of 1m on north-east side of the stem. Washing line embedded in main stem at a height of 1.5m. Main stem bifurcates at a height of approximately 4m. Previously heavily reduced to a height of approximately 6m. Four primary leaders emerging from reduction points with tight forks evident at unions. 	<ul style="list-style-type: none"> Retain in context of proposed development. Remove washing line embedded in north-east stem. Ensure protection of RPA throughout development works. 	10+	C2	150	6.92
G1	1no. Goat Willow, 1no. Hawthorn	≤ 10	≤ 1x280 1x250 1x180 (ms)	N E S W	≤ 0 ≤ 1 ≤ 6 ≤ 4	0.1-N ≥ 1	EM M/P	<ul style="list-style-type: none"> Closely spaced group. Goat Willow has evidently failed at base with two lateral primary leaders emerging from base to north and south, with subsequent limited future potential. Hawthorn has three primary leaders emerging from approximately 0.4m and is evidently in a terminal state of decline. 	<ul style="list-style-type: none"> Remove Goat Willow due to limited future potential. Remove Hawthorn as in terminal state of decline. Replace with tree of species that grows to moderate size (e.g. Fastigate Hornbeam or Liquidamber) towards south-west corner. 	<10	U	≤ 79	≤ 5
G2	2no. Sycamore	≤ 14	≤ 1x230 1x220 (ts)	N E S W	≤ 4 ≤ 4.5 ≤ 4 ≤ 4	2-E ≥ 2	SM G	<ul style="list-style-type: none"> Very closely spaced group, with approximately 125mm space between the two stems. Located approximately 750mm from western boundary wall. Northern tree bifurcates at a height of approximately 5m. 	<ul style="list-style-type: none"> Retain in context of proposed development. Ensure protection of RPA throughout development works. 	10+	C2	≤ 46	≤ 3.82
G3	1no. Silver Birch, 1no. Sycamore	≤ 13	≤ 1x350 1x190 (ts)	N E S W	≤ 4 ≤ 6 ≤ 5 ≤ 5	1-W ≥ 1	EM G	<ul style="list-style-type: none"> Closely spaced group growing within hedge H4. Silver Birch has a 190mm diameter secondary leader at a height of 1m on western side of stem. Evidently previously reduced to approximately 2m in height, with four primary leaders emerging from reduction points with tight forks. Sycamore is self-set and bifurcates at a height of 1m with a very tight fork and included bark union. 	<ul style="list-style-type: none"> Remove in order to carry out development as proposed. Replace with tree of species that grows to moderate size (e.g. Fastigate Hornbeam or Liquidamber) within proposed new lawn area to north-east. 	10+	C2	≤ 72	≤ 4.78
H1	Leyland Cypress, Beech, Holly, Privet	≤ 9	≤ 275	≤ 5 wide	0.1-N ≥ 0	Y-SM	G	<ul style="list-style-type: none"> Unmanaged boundary hedge. Hollies reduced to approximately 6m in past. 	<ul style="list-style-type: none"> Provide adequate protection throughout development. 	10+	C2	N/A	≤ 3.3

TREE SURVEY SCHEDULE FOR ARBORICULTURAL IMPACT ASSESSMENT
Site: Cherry Tree House, Preston Old Road, Blackburn, Lancashire, BB2 5NU
Agent for Client: JEI Ltd

Surveyor: Kendall Rigg <small>HND TechArborA</small>
Survey Date: 26 August 2015
Job Ref: BTC935

No.	Species	Height	Stem Diam.	Branch Spread	Branch & Canopy Clearances	Life Stage	PC	General Observations and Comments	Management Recommendations	ERC	Cat. Grade	RPA (m ²)	RPA Radius (m)
H2	Leyland Cypress, Sycamore, Holly, Beech, Privet	≤ 10	≤ 200	≤ 4 wide	0.1-E ≥ 0	SM	M	<ul style="list-style-type: none"> Unmanaged boundary hedge. Hollies reduced to approximately 6m in past. Sycamores previously reduced to ground level. 	<ul style="list-style-type: none"> Provide adequate protection throughout development. 	10+	C2	N/A	≤ 2.4
H3	Leyland Cypress	≤ 2.5	≤ 6x50 (ms)#	≤ 3 wide	0.1-S ≥ 0	EM	M	<ul style="list-style-type: none"> Previously reduced to 2m in height. Unmanaged boundary hedge. 	<ul style="list-style-type: none"> Provide adequate protection throughout development. Extend hedge with additional planting to the east. 	10+	C2	N/A	≤ 1.47
H4	Leyland Cypress	≤ 14	≤ 260	≤ 4 wide	0.1-W ≥ 0	SM	M-G	<ul style="list-style-type: none"> Two sections of unmanaged hedge planted as a screen around a shed and a storage area. Group G3 located within hedge. 	<ul style="list-style-type: none"> Remove in order to carry out development as proposed. 	10+	C2	N/A	≤ 3.12
H5	Hawthorn	≤ 2	≤ 6x25 (ms)#	≤ 2 wide	0.1-W ≥ 0	Y	G	<ul style="list-style-type: none"> Two short sections approximately 6m apart. Remnants of a boundary hedge. 	<ul style="list-style-type: none"> Remove in order to carry out development as proposed. 	10+	C2	N/A	≤ 0.73

BS5837:2012 Table 1 – Cascade Chart for Tree Quality Assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
<p>Category U</p> <p>Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years</p>	<ul style="list-style-type: none"> ▪ Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) ▪ Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline ▪ Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <p><i>Note: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see BS5837:2012 paragraph 4.5.7.</i></p>			Red
1. Mainly arboricultural qualities		2. Mainly landscape qualities	3. Mainly cultural values, including conservation	
Trees to be considered for retention				
<p>Category A</p> <p>Trees of high quality with an estimated remaining life expectancy of at least 40 years</p>	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	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)	Green
<p>Category B</p> <p>Those of moderate quality and value: those in such a condition as to make a significant contribution. A minimum of 20 years is suggested.</p>	Trees that might be included in the high category, but are downgraded because of impaired condition. Examples include the presence of remediable defects including unsympathetic past management and minor storm damage	Trees present in numbers, usually as groups or woodlands, so they form distinct landscape features which attract a higher collective rating than they might as individuals. But which are not, individually, essential components of formal or semi-formal arboricultural features. For example, trees of moderate quality within an avenue that includes better, A category specimens. Or trees which are internal to the site, therefore individually having little visual impact on the wider locality	Trees with clearly identifiable conservation or other cultural benefits	Blue
<p>Category C</p> <p>Those trees of low quality and value: currently in adequate condition to remain until new planting could be established - a minimum of 10 years is suggested - or young trees with a stem diameter below 150 mm</p>	Trees not qualifying in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary screening benefit	Trees with very limited conservation or other cultural benefits	Grey
	<p>Note – Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150mm should be considered for relocation</p>			

- TEMPORARY PROTECTIVE FENCING SPECIFICATION -

Construction Exclusion Zones (CEZs), enclosed by **Temporary Protective Fencing**, as detailed below and to be agreed with the Local Planning Authority (LPA), shall:

1. be retained in place throughout the development process, as specified in the 'Temporary Protective Fencing Construction' section below and detailed in BS5837:2012 Figure 2 (overleaf);
2. be sited in the area(s) defined by the Root Protection Areas on the associated Tree Plan;
3. be erected prior to any construction, demolition or excavation works and remain in place for the duration of the project;
4. preclude any delivery of site accommodation and/or materials and/or plant machinery;
5. preclude all construction related activity, with the sole exception of specified arboricultural works and any other works to be carried out under supervision that have been agreed by all parties; and
6. preclude the storage of all development related materials and substances including fuels, oils, additives, cement and/or any other deleterious substance.

Any incursion into CEZs must be by prior arrangement, following consultation with the LPA.

Temporary Protective Fencing Construction

1. Temporary protective fencing panels shall be weldmesh "Heras" panels of at least 2.0 metres in height.
2. The panels shall butt together and be securely fixed to a scaffold framework, as per 3 to 5 below.
3. The scaffold framework shall comprise of upright poles of at least 3.0 metres in length driven no less than 0.6 metres into the ground at maximum 3.0 metre centres with horizontal and diagonal poles fixed to the uprights, as per 4 to 5 below.
4. The two horizontal rail poles shall be attached to the uprights at heights of 0.6 and 1.8 metres with 3 no. clamps to each joint.
5. The diagonal scaffold pole struts be clamped to the top rail of the scaffold framework at a 45° angle and extend back into the CEZ and clamped to a 0.7 metre length of scaffold tube that shall be driven no less than 0.5m into the ground.
6. No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to tree roots when locating posts.
7. A 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" (see Figure 1, below) shall be fixed to every 10.0 metre length of protective fencing.
8. On completion and prior to any demolition or construction works, site preparation, excavation or delivery of plant and materials, the Consulting Arboriculturist shall inspect the Temporary Protective Fencing.

Figure 1: CEZ Warning Sign

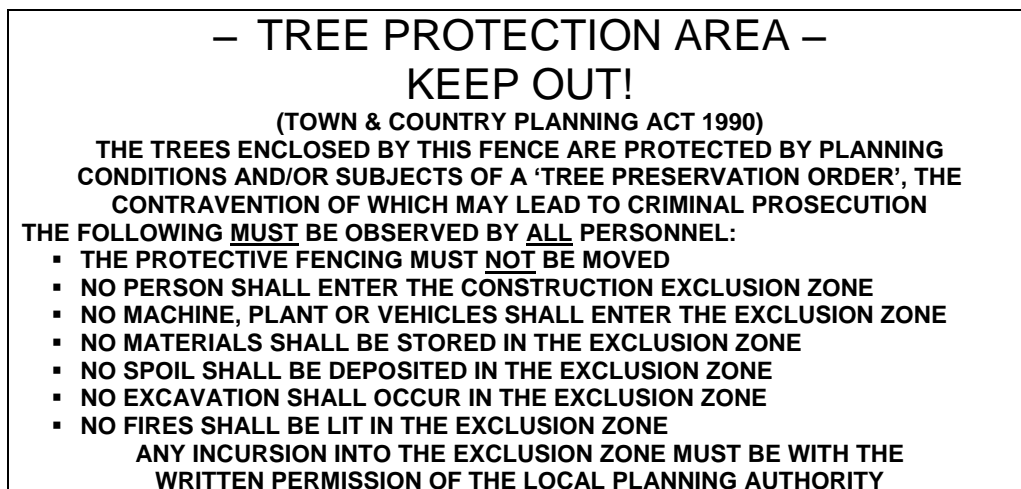


Figure 2: BS5837:2012 Default specification for protective barrier

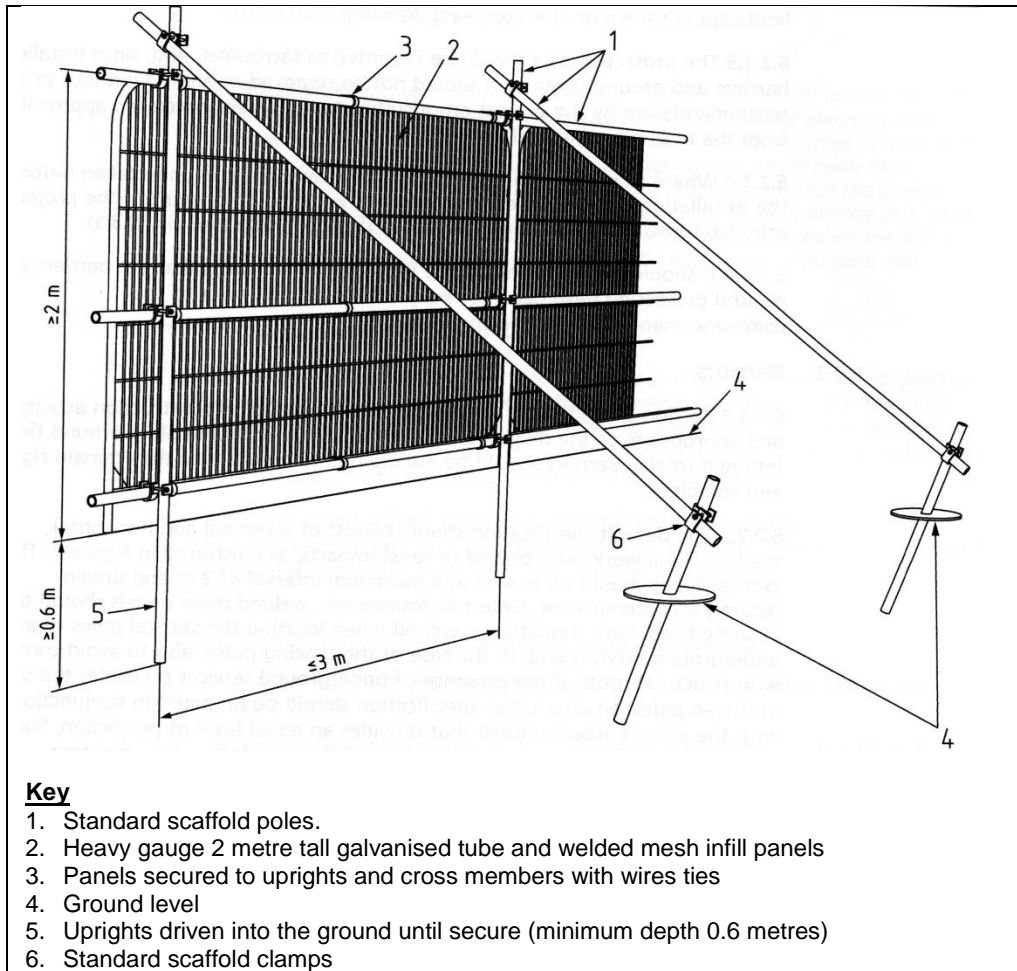
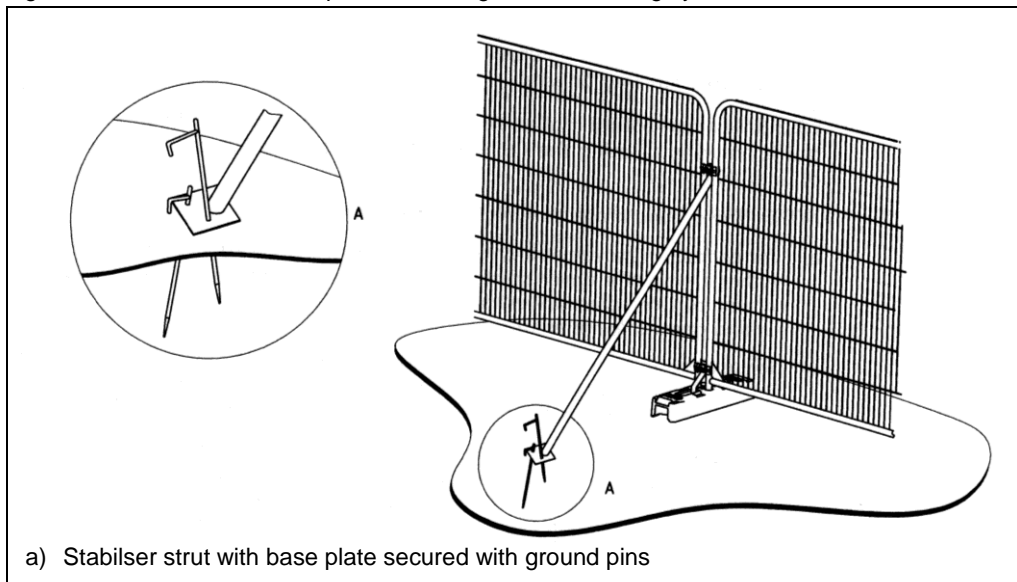
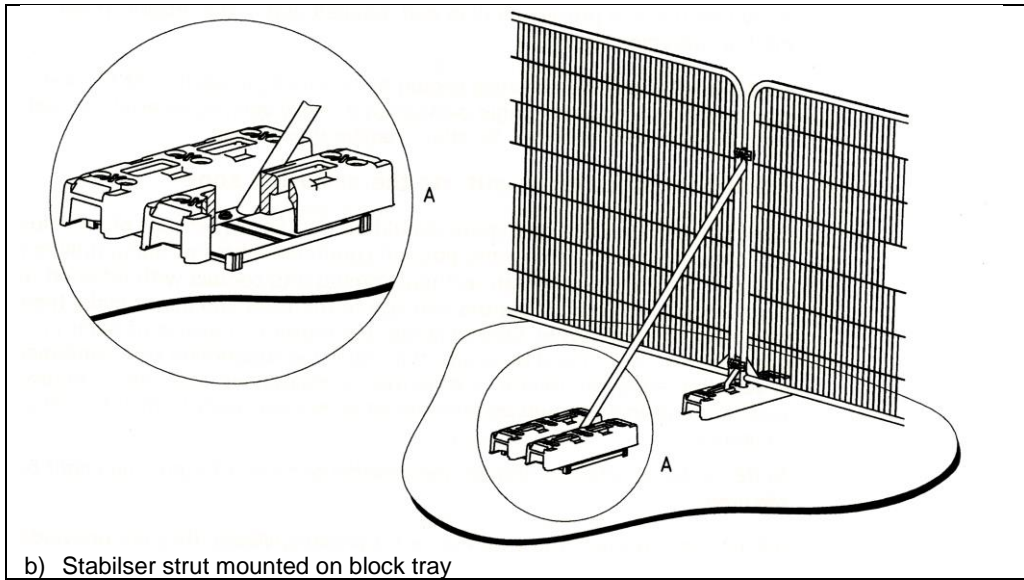
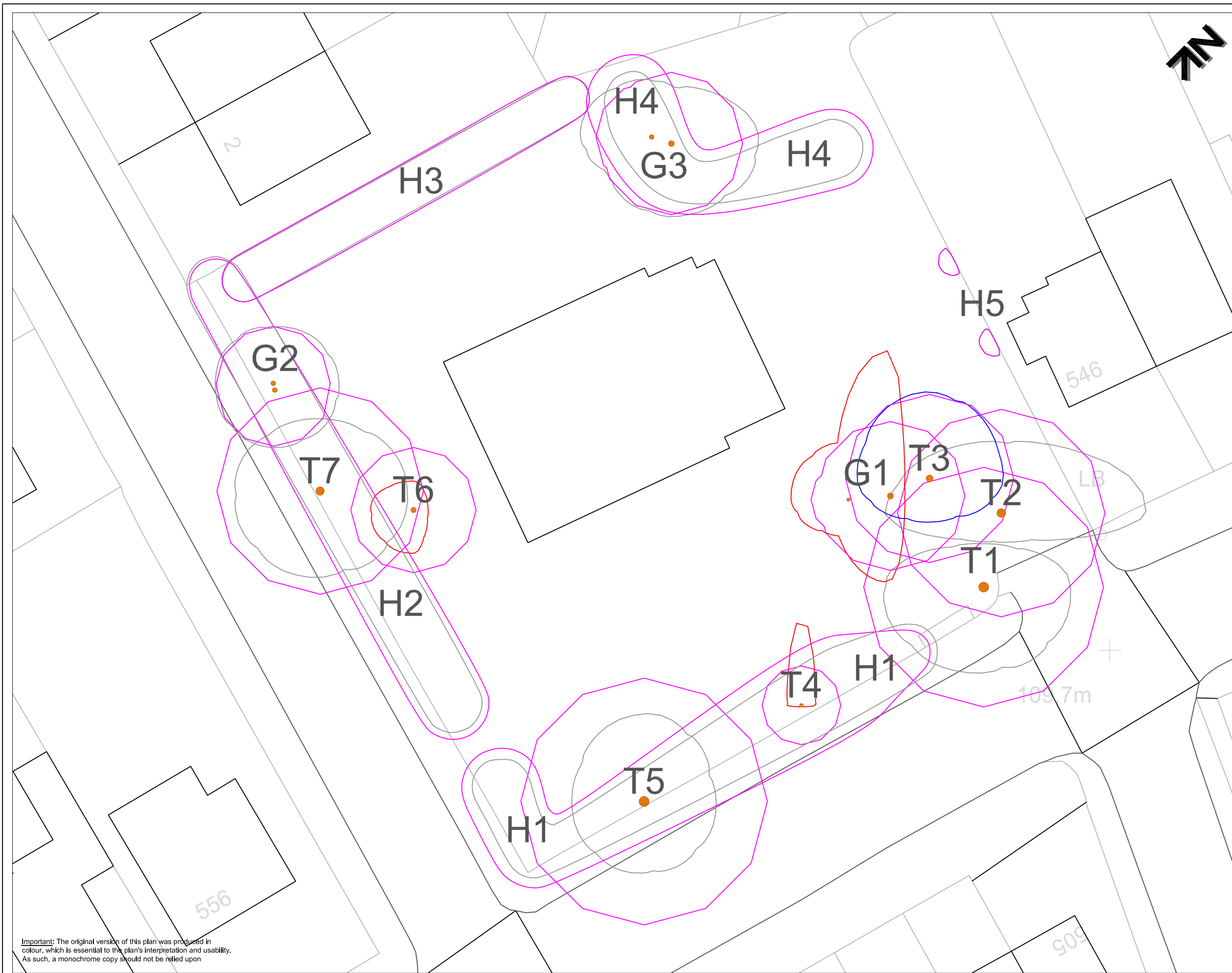


Figure 3: BS5837:2012 Examples of above-ground stabilising systems





b) Stabiliser strut mounted on block tray




KEY

T = Individual Tree
 G = Group of Trees
 H = Hedge


Please refer to associated Tree Survey Schedule for specific details in respect of items below:

Tree Categorisations:


Those to be Considered for Retention:

 Category 'A' Tree/Group/Hedge
 Those of a High Quality with an Estimated Remaining Life Expectancy of at Least 40 Years

 Category 'B' Tree/Group/Hedge
 Those of a Moderate Quality with an Estimated Remaining Life Expectancy of at Least 20 Years


 Category 'C' Tree/Group/Hedge
 Those of Low Quality with an Estimated Remaining Life Expectancy of at Least 10 Years, or Young Trees

Those Considered Unsuitable for Retention:

 Category 'U' Tree/Group/Hedge
 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

Note: The locations of the trees were not included on the OS site plan provided, and their locations were subsequently plotted by the arboricultural surveyor at the time of the survey using GPS siting and measurement from site features where possible. As such, the plotted locations of the trees, groups and hedges cannot therefore be considered to be wholly accurate

Root Protection Areas (RPAs):

 RPAs
 Area(s) of Ground Around Trees that Should be Protected Throughout Development Works with Protective Fencing to form a Construction Exclusion Zone

Project:
 CHERRY TREE HOUSE
 PRESTON OLD ROAD
 BLACKBURN
 LANCASHIRE
 BB2 5NU

Agent for Client:
 JEI LTD

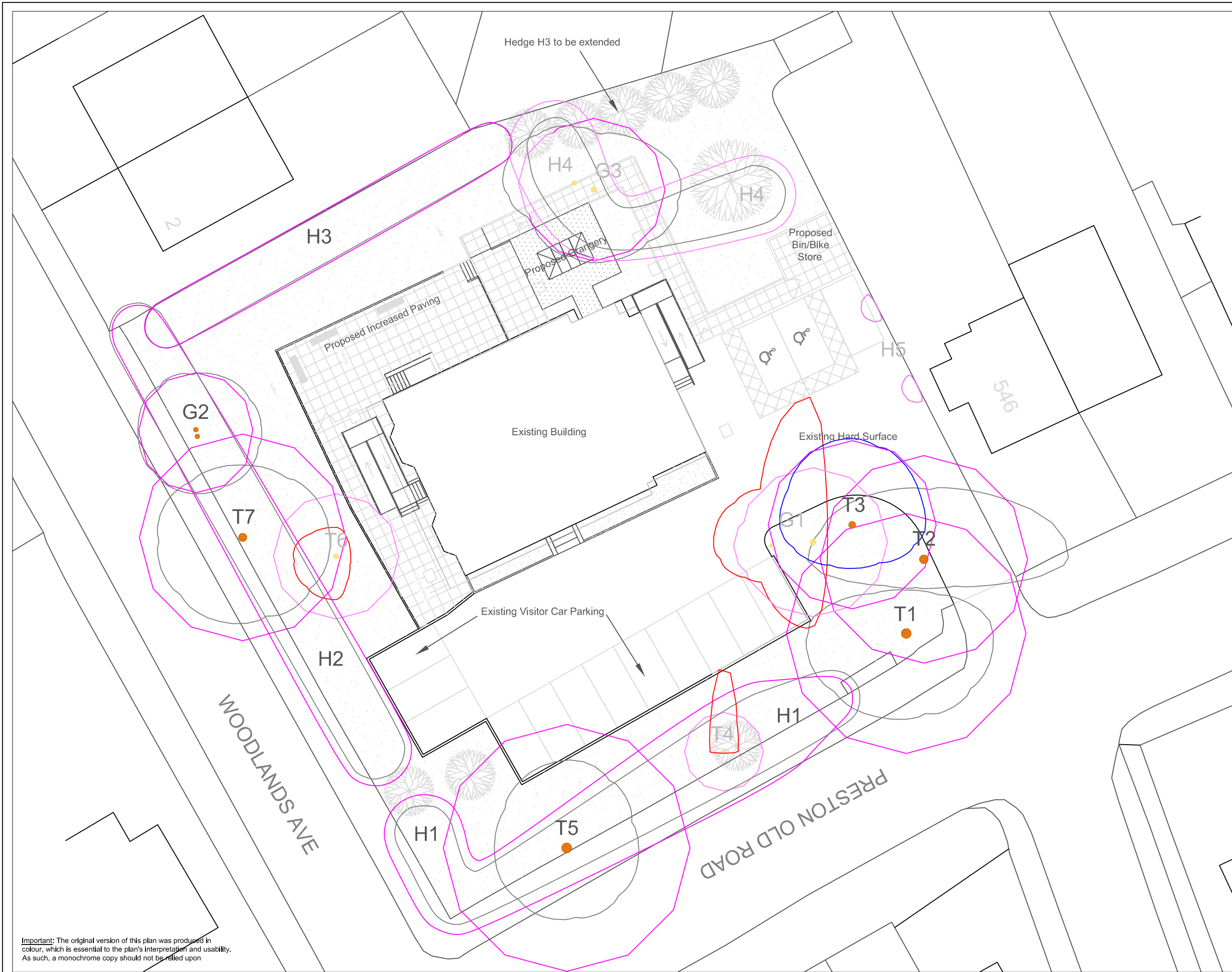
Title:
TREE CONSTRAINTS PLAN
 in Relation to Proposed Conversion to Care Home and Construction of Orangery, Hard Landscaping, and Car Parking

Scale: 1:250@A3
 Date: August 2015
 Drawn by: JK
 Checked by: KR



Ref: BTC935-TCP Rev:

Important: The original version of this plan was produced in colour, which is essential to the plan's interpretation and usability. As such, a monochrome copy should not be relied upon



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KEY

T = Individual Tree
 G = Group of Trees
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Please refer to associated Arboricultural Impact Assessment Report for specific details in respect of items below:

Tree Categorisations:

Those to be Considered for Retention:

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 Those of a High Quality with an Estimated Remaining Life Expectancy of at Least 40 Years
- Category 'B' Tree/Group/Hedge
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- Category 'C' Tree/Group/Hedge
 Those of Low Quality with an Estimated Remaining Life Expectancy of at Least 10 Years, or Young Trees

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 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

Root Protection Areas (RPAs):

- RPAs
 Area(s) of Ground Around Trees that Should be Protected Throughout Development Works with Protective Fencing to form a Construction Exclusion Zone

Indicative New Tree Planting:

- Suggested locations for planting of new trees as part of site landscaping. Numbers, species and locations to be agreed with LPA

Note 1: The locations of the trees were not included on the OS site plan provided, and their locations were subsequently plotted by the arboricultural surveyor at the time of the survey using GPS siting and measurement from site features where possible. As such, the plotted locations of the trees, groups and hedges cannot therefore be considered to be wholly accurate

Note 2: Trees with their identification numbers labelled in grey are recommended/proposed for removal in the context of the development

Project:
 CHERRY TREE HOUSE
 PRESTON OLD ROAD
 BLACKBURN
 LANCASHIRE
 BB2 5NU

Agent for Client:
 JEI LTD

Title:
TREE IMPACT PLAN
 in Relation to Proposed Construction of Orangery, Additional Car Parking, and Refuse and Cycle Storage Area

Scale: 1:250@A3
 Date: September 2015
 Drawn by: JK
 Checked by: KR

Bowland Tree Consultancy Ltd
 e: info@bowlandtreeconsultancy.co.uk
 t: 01254 825098

Ref: BTC935-TIP Rev: