PLANNING DESIGN ENVIRONMENT

Ascent Housing Phase 5
Site 3 – Albert Street, Biddulph, Staffordshire
Arboricultural Impact Assessment

Report Ref: TEP.3774.002

Genesis Centre
Birchwood Science Park
Warrington
WA3 7BH

T: 01925 844004
F: 01925 844002
E: tep@tep.uk.com
W: www.tep.uk.com

Ascent Housing Phase 5: Site 3 – Albert Street, Biddulph, Staffordshire
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Report Reference: TEP.3774.002
Version 2.0
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Prepared by:

TEP
Arboricultural Consultant

TEP
Genesis Centre
Birchwood Science Park
Warrington
WA3 7BH
Tel: 01925 844004
Fax: 01925 844002
E-mail: tep@tep.uk.com

for

Ascent Housing LLP
Apex House
266 Moseley Road
Manchester
M19 2LH

Written:	Checked:	Approved:
PJH	RNT	JGS

Site 3 - Albert Street– Arboricultural Impact Assessment

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DRAWINGS

1.0 INTRODUCTION

1.1 TEP has been commissioned by Ascent Housing to conduct an arboricultural survey of land off Albert Street in Biddulph, Staffordshire. This report details the arboricultural impact of developing the site, subsequent mitigation recommendations and protective measures.

1.2 The survey was carried out in January 2013 by means of inspection from ground level by a qualified Arboricultural Consultant. Trees were assessed in accordance with *BS 5837:2012 Trees in relation to design, demolition and construction – recommendations.*

1.3 Under the British Standard the assessment of trees is made objectively. The categorisation method identifies the quality and value of the existing tree stock.

1.4 A topographical survey was used to record the position of trees and vegetation (Ref: 1398_02). Where the age distribution and species mix of tree cover was relatively uniform, trees were plotted as groups. For the purposes of this report it is assumed that the detail on the drawing is accurate. A number of trees were not shown on the topographical surveys and therefore TEP's surveyor estimated their locations

1.5 A total of 5 individual trees (T1-T5) and 4 groups (G1-G4) were surveyed and mapped (refer to Drawing 1). All arboricultural information recorded during the survey is presented at Appendix 1.

1.6 The nature of the soils on site was not assessed during the survey. The possibility of soil movement due to tree root activity cannot be discounted. Prior to the undertaking of foundation depth calculations the exact location of all trees in relation to structures will be required.

1.7 This report provides the results of the survey and includes the following:

- A schedule of all trees located on, or within influencing distance of the proposed development site (Appendix 1);
- An assessment based on *BS 5837:2012*, of trees in terms of their potential value within any future development. On the basis of this assessment trees have been categorised into one of four categories: A, B, C or U (Appendices 1 & 2);
- An assessment, based on *BS 5837:2012*, of the requirement for protection of trees during the construction phase (Section 6);
- Advice on removal, retention and management of trees (Sections 5 & 7);
- A Tree Constraints Plan detailing tree quality categories, canopy spreads and Root Protection Areas (**RPA**) for all trees surveyed (Drawing 1); and
- A Tree Removal and Protection Plan detailing the development proposals and trees to be retained (Drawing 2).

2.0 THE SITE AND SURROUNDINGS

2.1 The site is accessed off Albert Street, approximately 0.3km south of the centre of Biddulph. The surrounding land use is residential.

2.2 The survey area comprises a small parking area and two rows of garages bordered by the rear gardens of properties on Highfield Road and Kingsfield Road. The majority of the site area is hard standing, areas to the rear of the garage blocks contain a mixed species bands of broadleaved woodland.

2.3 Weather conditions during the survey were bright with occasional showers.

2.4 Inspection of trees was restricted in some cases by restricted access or their position in private gardens. These trees were surveyed insofar as was possible from accessible areas of the site.

Development Proposals

2.5 The proposed development is residential and includes four units with associated car parking and hard and soft landscaping.

2.6 Detail of the proposals is shown on Drawing 2 and is based on the proposed site plan (Ref: 1398_02 A) supplied by John McCall Architects.

3.0 STATUTORY PROTECTION AND GUIDANCE

National Planning Policy Framework (NPPF)

3.1 The NPPF assumes protection of all ancient woodland and veteran trees unless it can be clearly demonstrated that the need of, or benefits of, development outweigh the loss. In this respect ancient woodland is defined as an area which has been wooded continuously since at least 1600 AD and a veteran as a tree of exceptional value for wildlife, in the landscape, or culturally because of its great age, size or condition

3.2 On this site there are no ancient woodland or veteran trees.

Tree Preservation Orders & Conservation Area Designations

3.3 Local authorities reserve the right to create Tree Preservation Orders (TPO) to protect the amenity value conferred to a location by a tree or group of trees. Where a TPO is in force, lopping, topping, felling, uprooting or wilful damage caused to a tree is prohibited and such actions may be prosecuted and incur an unlimited fine. Works to TPO protected trees must only be undertaken with the written consent of the local authority.

3.4 Staffordshire Moorlands Council confirmed that no trees on or immediately adjacent to the site were subject to Tree Preservation Orders or Conservation Area status.

Protected Species – Bats

3.5 Mature trees often contain cavities, crevices and hollows which are a potential habitat for roosting bats. Bats are afforded protection under Schedule 5 of the *Wildlife and Countryside Act* 1981 (as amended), as well as under Schedule 2 of the *Conservation of Species and Habitats Regulations 2010*, and as such causing damage to a bat roost constitutes an offence.

3.6 A preliminary ground level appraisal of the wildlife habitat value of each tree was undertaken as part of the arboricultural survey. No trees were noted as having features suitable to support roosting bats.

3.7 Should the presence of a bat roost be suspected whilst undertaking works on any other trees and groups on site, operations must be halted until a licensed bat handler or ecologist can provide advice.

Protected Species - Birds

3.8 Trees are a potential habitat for nesting birds, which (as well as their nests and eggs) are protected under the *Wildlife and Countryside Act 1981* (as amended). This makes it an offence to intentionally or recklessly, damage or destroy an active birds nest or any part thereof.

3.9 Due to the suitability of the trees within the survey boundary for nesting birds, all tree work should ideally be undertaken outside the bird nesting season (British bird nesting season: March to August inclusive).

3.10 If this is not possible then a detailed inspection of each tree should be undertaken by a qualified ecologist immediately prior to the arboricultural works. Should an active nest be found (being built, containing eggs or chicks) then any work likely to affect the nest must be halted and a working boundary of 5m left intact around the nest until the nest becomes inactive.

National House Building Council

3.11 This report has been written in accordance with, and to satisfy the requirement of *BS 5837:2012*.

3.12 The nature of the soils on site was not assessed during the survey. The possibility of soil movement due to tree root activity cannot be discounted.

3.13 Prior to the undertaking of foundation depth calculations the exact location of all trees in relation to structures will be required.

3.14 Some trees were not shown on the topographical survey (Ref: 1398_002 Survey Operations) used to record the position of trees and groups, therefore TEP's surveyor estimated their locations. Prior to the undertaking of foundation depth calculations the exact location of all trees in relation to structures will be required.

3.15 Any discrepancies in tree location or missing trees will require further discussion with a qualified Arboricultural Consultant.

4.0 TREE POPULATION

4.1 A total of 5 individual trees (T1-T5) and 4 groups (G1-G4) were recorded within influencing distance of the site. A schedule of all trees and groups in terms of species, condition, age, management recommendations and *BS 5837:2012* quality categories is provided at Appendix 1.

4.2 All the surveyed trees lie beyond but within influencing distance of the site boundary. They are all middle aged and vary in condition.

4.3 Cypress species (G1) lie in private gardens beyond the north western boundary and overhang the fence line by up to 1m, these trees are situated on raised ground above site level. The trees in this group have typically dense crowns and are in good physiological condition with no significant visible defects.

4.4 A large group of trees (G2) are located immediately beyond the eastern boundary to the rear of the garages. This group provides a significant arboricultural feature within the site. Although access was restricted to this group, it appears in a reasonable condition and has no visible defects. It is visually prominent and display good vigour.

4.5 Trees T1 & T2 located within residential gardens adjacent the site are middle aged birch and cherry species. They both have reasonable form and increased ornamental value as they are the only trees within the rear gardens in the vicinity.

4.6 Located behind the garages to the west of the site are trees T3 to T5 and groups G3 to G4. T3 a mature lime, has the most significance and prominence within the site. This tree is in good condition despite a minor included cavity to the north. A rope has previously been tied around one of the main stems resulting in this cutting into the bark around the union. There was no evidence to suggest this was affecting the health of the tree at present although the long-term future of this stem may be reduced.

4.7 Tree T4 is a middle aged sycamore in a reasonable condition. It is suppressed by T3 and has a rope tied tightly around one main stem leading to the potential failure of the stem. Consequently the life expectancy of this tree is reduced.

4.8 Tree T5 and group G4 are middle aged willows. Many are leaning, have twisted trunks or stems that have failed. One main stem from T5 is resting on the roof of the garages. These trees have a value within the site as a cohesive group but their condition and life expectancy reduces their long-term contribution.

4.9 Group G3 is a large group of primarily rhododendron and privet with a few willow of shrubby growth. Rhododendron is an invasive species therefore it will need to be removed from the site.

4.10 Tree and group locations, their quality categories and canopy spreads are shown on Drawing 1.

Tree Quality Categorisation

4.11 Under *BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations* trees and groups are objectively assigned a quality category designed to quantify their value within any future development. Table 1 presents a summary of the categories presented in the British Standard. The full table has been reproduced at Appendix 2.

Table 1: Summary of *BS 5837:2012* tree quality categorisation criteria

Category A	Trees of high value including those that are particularly good examples of their species and/or those that have visual importance or significant conservation or other value
Category B	Trees of moderate value including those that do not qualify as Category A due to impaired condition and/or those that collectively have higher value than they would as individuals; also trees with material conservation or other value
Category C	Trees of low value including those with very limited merit or impaired condition; trees offering transient or temporary landscape benefits
Category U	Trees with irremediable defects and anticipated early loss due to collapse; dead trees or those in immediate decline and those with infectious pathogens that threaten other trees

5.0 IMPACTS OF THE PROPOSED DEVELOPMENT

5.1 2 individual trees and 1 group would be removed to facilitate the development proposals as their canopies and rooting areas are within the proposed footprint of a new dwelling and car park area.

5.2 Tree T3 is the only moderate value tree that requires removal as it would not be possible to retain. All other removed trees would have low value (Category C).

5.3 All trees in third party ownership will be retained.

5.4 During the demolition of the garages it is presumed that the '*top down pull back'* method of demolition shall be utilised where practicable.

5.5 Site hoarding will serve to protect the retained trees during development. No additional tree protection fencing shall be required.

5.6 The breaking-out of hard-surfacing and the excavation of material in close proximity of retained trees or groups will need to be conducted in a sensitive and controlled manner.

5.7 Upon completion of the demolition process the site hoarding shall be aligned with the boundary line.

6.0 TREE PROTECTION REQUIREMENTS

Root Protection Areas

6.1 As per *BS 5837:2012*, the **Root Protection Area (RPA)** is calculated using each tree's diameter at 1.5 metres (refer to Appendix 1) and represents the minimum area around each tree that must be left undisturbed to ensure their survival.

6.2 Tree roots typically spread two times the width of the crown, although this figure may be significantly increased for certain species and where specific ground conditions are present. The majority of tree roots are found in the top 600 mm of soil and most of the fine roots that absorb water and nutrients are found in the top 100 mm.

6.3 The morphology of roots is influenced by past and present site conditions (the presence of roads, structures and underground services), soil type, topography and drainage. This means that a tree's roots may not be uniform in their extent and the **RPA** may not be a circular area centred on the tree stem.

6.4 On this site, barriers to growth are likely to be areas of hard standing and the garage buildings. Roots are unlikely to be absent in all these areas but where unfavourable conditions exist, growth will certainly be impeded.

6.5 The **RPA's** have been adjusted or offset to most accurately represent the likely spread of roots for each individual tree (refer to Drawing 1).

Protective Fencing

6.6 Site hoarding will be sufficient to protect third party trees during construction. No additional tree protection fencing will be required around trees.

6.7 Site hoarding to the rear of the garages must be put in place post demolition before the arrival of other machinery or materials onto site or the erection of site huts.

Ground Contamination

6.8 Storage areas for liquids such as fuels, oil or paint should not be located within 10m of any trees on or within proximity to the site due to the risk of soil contamination caused by accidental spillage.

6.9 Particular care must be taken when working on or close to sloping ground to avoid unintentional runoff into the rooting area of retained trees.

Underground Utility Issues

6.10 No utility drawings were provided and no assessment has been made of the juxtaposition of tree roots and the likely location of new services. It has been presumed for the purposes of this report that all utilities will be installed outside of the **RPA's** shown on Drawing 2.

6.11 Where the installation of services within the **RPA's** of retained trees is unavoidable, appropriate work methods will be required to ensure the safe long-term survival of those trees. This process will require additional consultation with a qualified Arboricultural Consultant and is likely to be more expensive than conventional trench installation.

Ground Level Changes

6.12 A rise or reduction in soil level can have major implications on the longevity and health of the trees. Minor changes (up to 100mm) can be tolerated in some cases but is heavily dependent on tree species, condition and growing environment.

6.13 Existing ground levels within the **RPA** should be respected as far as is reasonably practicable. The advice of a qualified Arboricultural Consultant should be sought if level changes are required.

7.0 ARBORICULTURAL RECOMMENDATIONS

Tree Work

7.1 The pruning of trees within groups G2 and G3 back to the boundary fence line will be necessary where the foliage overhangs the site; this is in order to prevent mechanical damage to branches during the construction phase. Rhododendron within G3 will require removal as it is classes as an invasive species.

7.2 The relevant landowner should be consulted prior to undertaking work to third party trees.

7.3 All tree surgery work should be carried out by a qualified contractor in accordance with *BS 3998:2010 Tree work – recommendations*.

Tree Planting

7.4 The proposals indicate that new tree planting will take place within the front gardens of the proposed properties and adjacent car parking areas. Tree species of a small to medium mature size would be suitable including ornamental rowan species (*Sorbus aucuparia*) ornamental maple species (*Acer sp*.), silver birch (*Betula pendula*), field maple (*Acer campestre*) and wild service tree (*Sorbus torminalis*).

7.5 Aftercare is vital to the survival of newly planted trees. Provision should be made for a minimum of two years maintenance of newly planted trees and include watering, formative pruning and the checking of tree ties and stakes.

7.6 The National Planning Policy Framework (NPPF) is a material consideration in the planning process and promotes a presumption in favour of sustainable development. In terms of the natural environment, development should minimise impacts on biodiversity and provide a net gain in biodiversity where possible.

7.7 In respect of trees, a sustainable development will be one whereby the total number, value or function provided by trees is maintained or increased or where the long-term prospects of the existing tree stock can be substantially improved. Net gains in biodiversity may be demonstrated where the number of tree species, variety of tree ages or range of niche habitats can be increased. Native, old, large or dead trees are likely to have a relatively significant impact on a scheme's environmental credentials, as will the connectivity of trees, hedges and woodland.

7.8 It is the recommendation of this report that tree planting has the potential to result in a net gain of long-term tree cover (estimated at 10 years post-construction). This is wholly dependent on appropriate species selection, tree quality and high establishment rates.

7.9 The extent of tree planting will ultimately be determined in agreement with Staffordshire Moorlands Council.

Post Construction Tree Care

7.10 Hazard recommendations are based on observations at the time of survey. Trees are dynamic living organisms whose structure is constantly changing. Even those in good condition can suffer from damage or stress. Following site development, regular (annual or biennial) inspections of all retained trees should be undertaken by a qualified Arboricultural Consultant.

8.0 SUMMARY

8.1 A total of 5 individual trees and 4 groups were surveyed during the preparation of this report. Based on an objective assessment made in accordance with *BS 5837:2012 Trees in relation to design, demolition and construction – recommendations*, there are 5 Category B trees or groups on or within influencing distance of this site.

8.2 2 individual trees and 1 group would be removed to facilitate the development proposals as their canopies and rooting areas are within the proposed footprint of a new dwelling and car park area.

8.3 Staffordshire Moorlands Council confirmed that no trees on or immediately adjacent to the site were subject to Tree Preservation Orders or Conservation Area status.

8.4 No trees were found to have features of a size and condition desirable to bats.

8.5 Site hoarding will be sufficient in this case to protect third party trees during construction. No additional tree protection fencing shall be required around trees.

8.6 The pruning of trees will be necessary where their foliage overhangs the site in order to prevent mechanical damage to branches and reduce the likelihood of future encroachment.

8.7 A pre-start meeting between the site contractor, a qualified Arboricultural Consultant and the council's Arboricultural Officer will allow any technical or logistical issues to be discussed.

8.8 The proposals indicate that new tree planting will take place within the front and rear gardens of the properties and adjacent car parking areas. It is the recommendation of this report that the proposed development has the potential to result in a net gain of long-term tree cover (estimated at 10 years post-construction).

8.9 The extent of tree planting will ultimately be determined in agreement with Staffordshire Moorlands Council.

APPENDIX 1

ARBORICULTURAL SURVEY DATA SHEETS

Surveyor PJH
Date 30.01.13
Town Biddulph
Site Site 3 - Land off Albert Street
Dwg Ref D3774.002

Ref	Species	Height	Stem Dia.	Crown Diameter	No. of stems/ individuals	Crown Spread North	Crown Spread South	Crown Spread East	Crown Spread West	Height of Lowest Branch	Direction of Lowest Branch	Maturity	Condition	Comments on form, condition, health and significant defects	Failure Potential	Size of part most likely to fail	Target Rating	Hazard Rating	BS5837 Tree Quality Assess.	Radius of RPA guide circle	BS5837 RPA Area	Management Recommendations	Estimated Remaining Contribution	Review Period	Next Review Date	TPO	GPS Co-ordinate
		(m)	(mm)	(m)	arising below 1.5m	(m)	(m)	(m)	(m)	(m)	(m)	Young, Middle Age, Mature	Good, Fair, Poor, Veteran		1,2,3,4	1,2,3,4	1,2,4,6,8	3 to 12	A,B,C,R (1,2,3)	(m)	(m2)		Long, Medium, Short	Years		(*)	
Trees																											
T1	Downy birch	9.5	210.0		1.0	2.5	2.0	2.5	2.5	5.0	E	Middle Age	Fair	Limited inspection due to location on third party land within rear garden. Located approx. 1.5m above site level. Good form and vigour; 5 degree lean north.				0.0	B,1,2	2.5	20.0		Long				
T2	Wild cherry	7.0	220.0		1.0	3.0	3.0	3.0	3.0	3.5	NE	Middle Age	Fair	Limited inspection due to location on third party land within rear garden. Located approx. 1.5m above site level. Good form and vigour.				0.0	B,1,2	2.6	21.9		Long				
T3	Lime	14.0	670.0		1.0	5.5	5.0	5.0	5.0	0.0		Mature	Good	Bifurcate at 2m. Extensive suckering around base. Previously reduced. Many crossing branches. Included cavity at approx 0.5m on north side with minor decay. Nylon rope cutting deep into the union. Birds nest.				0.0	B,1	8.0	203.1		Long				
T4	Sycamore	11.0	440.0		1.0	1.0	4.0	3.5	3.5	4.0	S	Middle Age	Fair	Bifurcate at 5m. Suckering at base. Slight lean to south. Nylon rope cutting deeply into the south side stem. Suppressed by T3 to the north. Large included bark wound to south-west at approx 0.5 to 1m. Minor dead wood.				0.0	C,1	5.3	87.6		Long				
T5	Willow	10.0	594.5		4.0	7.0	5.0	7.0	6.0	0.0		Middle Age	Fair	Restricted access to survey. Leaning north-east. Multi-stemmed. Trunks twisted and fused together. Dead wood in canopy. Branch to north resting on garage roof. I main stem fallen.				0.0	C,1	7.1	159.9		Medium				
Groups																											
G1	Cypress; Yew	to 7	160 - 290		20.0					3.0	S	Middle Age	Good	Limited inspection. Located 0.5m above site level; Forsythia & dogwood growing at base. Linear boundary screening group all multiple stemmed at ground level with no significant defects observed. Good yew to rear of group.				0.0	B,1,2	Refer to Drawing	n/a		Long				
G2	Sycamore, Ash, Common privet & willow spp	to 10	to 280		10+					4.0	NW	Middle Age	Fair	Limited inspection due to location at rear of garages. Unmanaged mixed species group; no observable defects. Canopies overhang garage roofs.				0.0	B,1,2	Refer to Drawing	n/a		Long				
G3	Common privet; willow, rhododendron.	to 18	to 650		20+					3.0	E	Middle Age	Fair	Limited inspection due to location to rear of garages. Large mixed species group; Crossing branches. No observable defects. Valuable habitat.				0.0	B,1,2,3	Refer to Drawing	n/a		Long				
G4	Willow, birch	12.0	to 350		10+							Middle Age	Poor	Untidy shrubby growth. Some multi-stemmed. Twisted trunks and branches. Leaning trees. Broken branches. Birds nest.				0.0	C,1,2	Refer to Drawing	n/a		Medium				

APPENDIX 2

SURVEY METHOD

APPENDIX 2: SURVEY METHOD

The survey of trees is conducted from ground level only. The nature of the soils on site is not assessed.

Trees are dynamic living organisms with a constantly changing structure; even trees in good condition can suffer from damage or stress. The information recorded is presented as being correct at the time of survey.

The following features of each tree, group of trees or wood may have been recorded in the Arboricultural Survey Data Sheets at Appendix 1.

Species The common name is given. The Latin name may also be given if further clarification is required.

Height Top height of tree recorded in metres.

Stem Diameter For single-stemmed trees the measurement is taken at 1.5 metres above ground level and recorded in millimetres.
For multi-stemmed trees an average all stems measured at 1.5m above ground level is used.
For tree groups a range from minimum to maximum diameters is provided based on measurements taken using one of the aforementioned methods.

No. of Stems A count of stems arising below a height of 1.5 metres.

Crown Spread The N, S, E and W branch spreads are recorded in metres to provide a representative crown shape.

Height of Lowest Branch
Crown clearance above ground level recorded in metres.

Direction of Lowest Branch
The direction of growth of the first significant branch from the point of attachment.

Maturity

Young	Trees than can reasonably be relocated or replaced like for like, without undue cost;
Middle Age	Trees in the established growth stage of their life with the potential to continue increasing in size;
Mature	Trees that have reached their ultimate size, given their location and surroundings;

Condition **Good, Fair, Poor.** An overall assessment of a tree's physiological and structural state in which factors that may increase its susceptibility to the effects of development are taken into account.

Veteran. Trees that are in such a condition as to significantly increase their biological, cultural or aesthetic value. This is characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned.

Comments A brief evaluation and description of the tree with comments on form, vitality, health and any significant defects or symptoms of ill-health.

BS 5837 Tree Quality Assessment
The tree quality assessment is based on Table 1 of BS 5837:2012 (See below). Four categories (A, B, C and U) are used to denote tree quality (A= High, B = Moderate, C = Low, U= Unsuitable for retention). Subcategories (1-3) denote the specific function value of the trees and the reasoning behind the allocation of a specific category (the subcategories may be used in combination but do not accumulate collective weight).

Root Protection Area (RPA)
The RPA is allocated to ensure that a sufficient area is left undisturbed during development. It is provided as an area (m^2) and as the radius of a circle (m) typically plotted from the centre of the stem.

The RPA is calculated using a mathematical equation included in BS 5837:2012 (Section 4.6 and Table D.1) and is based on a trees stem diameter. In some cases the RPA may need to be adapted to best reflect the likely area and position of roots required to ensure survival; this may be based on criteria such as the tree's condition, species, crown spread and any barriers to growth. Any alteration must be justifiable but is made at the Arboricultural Consultants discretion.

Recommendations
Recommendations for arboricultural works, etc. are based on the **current** land use, and take into account the tree or group attributes without bias to the proposed development.

Estimated Remaining Contribution
An estimation of the life expectancy as healthy functioning tree. This will be influenced by species and the condition of the tree at the time of survey.

Long	> 40 years
Medium	20 – 40 years
Short	less than 20 years

APPENDIX 2: SURVEY METHOD

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)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	• Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline • Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality *NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.*			See Table 2
	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 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)	See Table 2
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 remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for 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	See Table 2
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 150 mm	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 benefits	Trees with no material conservation or other cultural value	See Table 2

British Standards Institute (2012) *BS5837:2012 Trees in relation to design, demolition and construction – Recommendations.* p.9

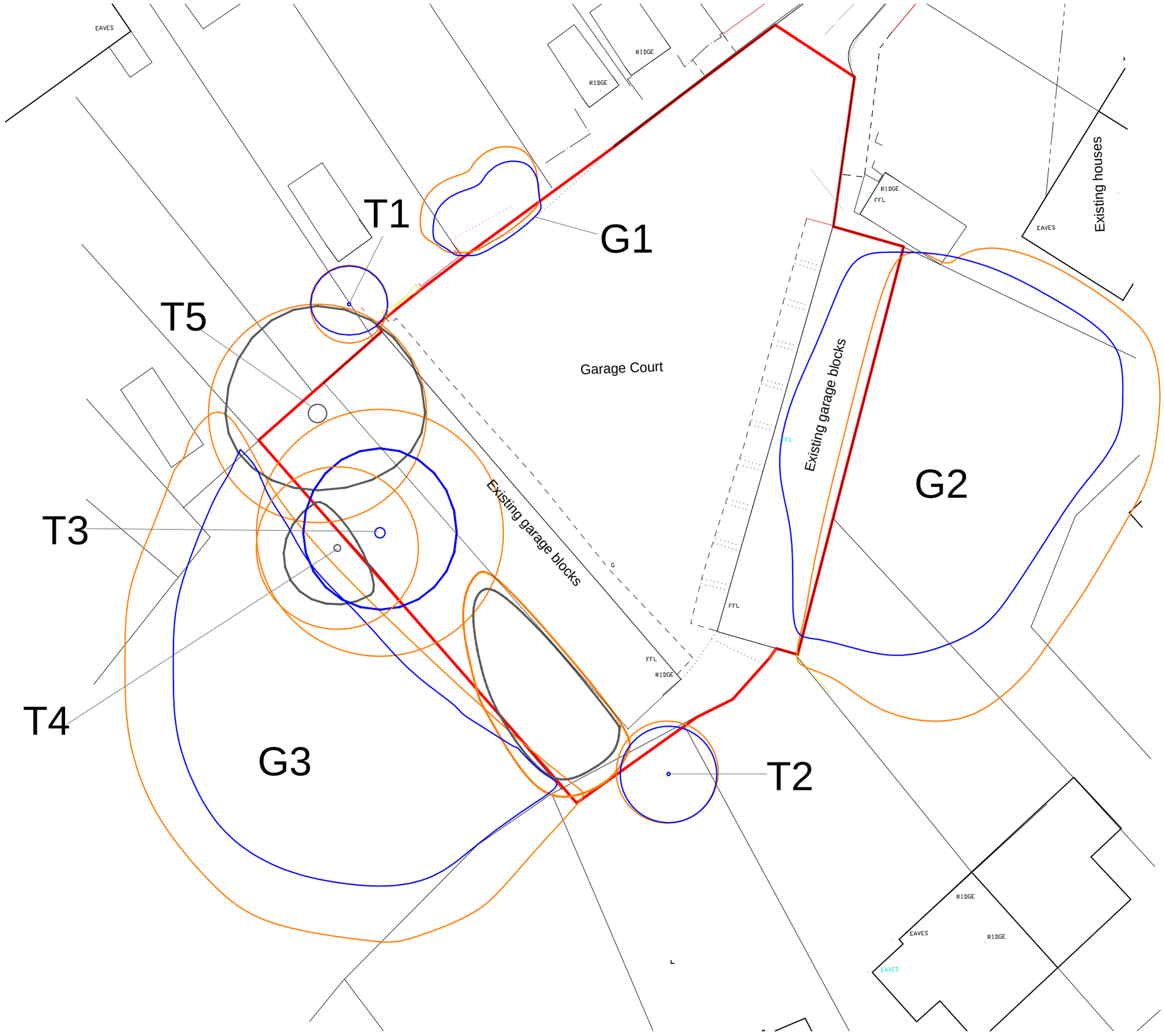
NOTES:

All young trees are assessed as quality category ‘C’ but this does not preclude their retention within a development.

For hedges the height, canopy spread and number of stems is recorded but they are not assigned a quality category.

DRAWING 1

TREE CONSTRAINTS PLAN



KEY

[This drawing must be reproduced in colour]

- T1 Individual trees
- G1 Groups of trees
- Root Protection Area (RPA)
- Survey Boundary

Tree Categorisation

(Tree quality assessment based on BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations)

- Category A (High quality)
- Category B (Moderate quality)
- Category C (Low quality)
- Category U (Unsuitable for retention)

NOTE: This drawing should be read in conjunction with the respective Arboricultural Data Sheets (Appendix 1).

Rev	Description	Drawn	Approved	Date
REV A	Extended boundary - new trees	KJT	TDP	JGS

TEP
Genesis Centre
Birchwood Science Park Warrington
WA3 7BH
Tel 01925 844004
Fax 01925 844002
e-mail tep@tep.uk.com

Project

Ascent Housing Phase 5:
Site 3 - Albert Street
Arboricultural Impact Assessment

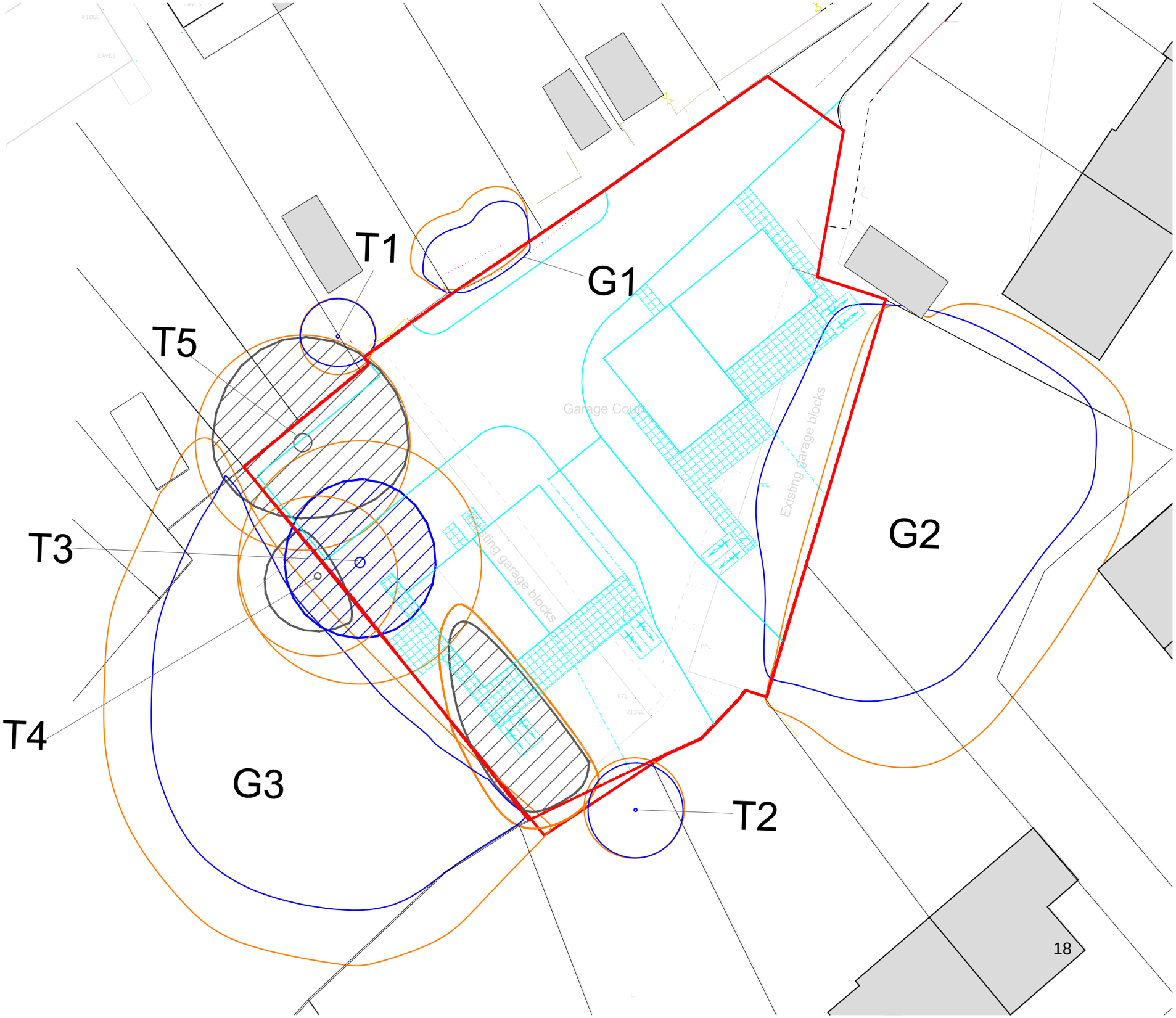
Title

Drawing 1:
Tree Constraints Plan (existing)

Drwg No		
D3774.003 A		
Scale: 1:250 @ A3		Date: 31/01/13
Drawn: PJH	Checked: RNT	Approved: JGS

DRAWING 2

TREE REMOVAL AND PROTECTION PLAN



KEY

[This drawing must be reproduced in colour]

- T1 Individual trees
- G1 Groups of trees
- Site Boundary

Trees to be retained

(Tree quality assessment based on BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations)

- Category A (High quality)
- Category B (Moderate quality)
- Category C (Low quality)
- Category U (Trees with existing or potential conservation value)

Trees to be removed

(Tree quality assessment based on BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations)

- Category A (High quality)
- Category B (Moderate quality)
- Category C (Low quality)
- Category U (Unsuitable for retention)

NOTE: This drawing should be read in conjunction with the respective Arboricultural Data Sheets (Appendix 1).

Rev	Description	Drawn	Approved	Date
A	Change of boundary - new trees	KJT	JGS	12/03/14

TEP
Genesis Centre
Birchwood Science Park Warrington
WA3 7BH
Tel 01925 844004
Fax 01925 844002
e-mail tep@tep.uk.com

Project

Ascent Housing Phase 5:
Site 3 - Albert Street
Arboricultural Impact Assessment

Title

Drawing 2:
Tree Removal and Protection Plan
(proposed)

Drwg No		
D3774.004 A		
Scale: 1:250 @ A3		Date: 31/01/13
Drawn: PJH	Checked: RNT	Approved: JGS