19 March 2015

Land at Higgins Brook, East of Chipping Lane, Longridge - Revised Scheme

Tree Quality Survey & Outline Development Implications

Report Number: 2001_R09a_JB_HM

Author: Jonathan Berry BA (Hons) DipLA AIEMA CMLI M.Arbor.A

Checked: Jack Jewell, BA (Hons), MLA

Tyler Grange

Contents

Appendices

Appendix 1: Tree Survey Explanatory Notes

Appendix 2: Tree Survey Table

Appendix 3: Revised Illustrative Masterplan (Ref: 013-008-008 Rev F)

Appendix 4: Development Implications - Overlay of Revised Illustrative Masterplan (2001/P61a March 2015)

Plans

Plan 1: Findings of Tree Quality Survey & Root Protection Areas (Sheet 1 of 5)
(2001/P38a March 2015)

Plan 1: Findings of Tree Quality Survey & Root Protection Areas (Sheet 2 of 5)
(2001/P39a March 2015)

Plan 1: Findings of Tree Quality Survey & Root Protection Areas (Sheet 3 of 5)
(2001/P40a March 2015)

Plan 1: Findings of Tree Quality Survey & Root Protection Areas (Sheet 4 of 5)
(2001/P41a March 2015)

Plan 1: Findings of Tree Quality Survey & Root Protection Areas (Sheet 5 of 5)
(2001/P42a March 2015)

Section 1: Introduction

1.1. Tyler Grange LLP (TG) has been appointed to undertake a Tree Survey and review of Development Implications in relation to the development of land to the east of Chipping Lane, Longridge, in light of alterations to the outline application scheme. The site located to the immediate north of the settlement of Longridge, hereafter referred to as the 'site'. The site is centred on Ordnance Survey (OS) grid reference SD 60377 38045 and still extends to a total area of 24.8 hectares (61.3 acres).

1.2. The revised development scheme comprises of a new residential development (reduced to up to 363 dwellings), including affordable housing and housing for the elderly, the relocation of Longridge Cricket Club to provide new cricket ground, pavilion, car park and associated facilities, new primary school, vehicular and pedestrian accesses, landscaping and public open space.

1.3. A copy of the revised Illustrative Masterplan is included at **Appendix 3**; and, an overlay of the Masterplan and Tree Survey findings is contained at **Appendix 4**.

1.4. The principal alterations comprise:

- A reduction in the number of units proposed from up to 520 dwellings to up to 363 dwellings resulting in a reduced built footprint and the reconfiguration of the internal development layout;
- The removal of development units from the eastern-most development field and the retention of the parcel as agricultural land (adjacent to Willows Farm);
- Provision of an increased landscape buffer between the existing housing at the northern edge of Longridge (Redwood Drive) and the proposed housing;
- The relocation of the proposed primary school further to the south-west and the incorporation of a larger area of associated playing fields; and
- The reconfiguration of the public open space and green infrastructure distribution within the layout, resulting in a smaller LEAP towards the south-west of the development and a new green infrastructure corridor towards the western part of the development.

1.5. The work associated with this outline application submission involved collecting data relating to the tree stock, in order to inform the overall development parameters and assess the implication of any associated tree loss.

Tree Survey

1.6. The original tree survey was undertaken during January 2014, during which the weather conditions were cold and wet, with a light wind present. The survey was updated and verified during July 2014 and March 2015, during calm and clear conditions.

1.7. No invasive investigations or climbing inspections were necessary to confirm visual or audible signs of defect or debility and no tissue or soil samples were undertaken. Where identified, signs of substantial defects or debility significant to the pre-development context have been recorded.

1.8. Tree climbing has been undertaken with reference to the consideration of potential for bats and the results are contained within a separate report.

Survey Methodology

1.9. The pre-development survey and assessment was undertaken in accordance with British Standard 5837:2012 'Trees in Relation to Design, Demolition and Construction – Recommendations' (hereafter BS5837:2012).

1.10. In accordance with the above recommendations, the tree survey included all trees within the Site boundary that were over 7cm diameter at breast height (dbh). Topographical survey data was available for the majority of the tree stock; however, some areas of denser tree planting have been approximately placed within groups that form cohesive arboricultural features either aerodynamically, visually, culturally or in biodiversity terms.

1.11. The tree survey involved collecting the following data:

- Tree Number / Group Reference;
- Species;
- Height;
- Branch Spread (in metres taken at the four cardinal points);
- Crown Clearance (in metres above the adjacent ground level);
- Age Class;
- Physiological Condition;
- Structural Condition;
- Estimated Remaining Contribution (in years);
- Management Recommendations; and
- Notes.

1.12. For further clarification, please refer to the tree survey explanatory notes in **Appendix 1**.

Tree Categorisation

1.13. The quality and value of each tree or group of trees has been recorded by allocating it to one of the four categories below in accordance with BS5837:2012. Categories A, B and C deal with trees that should be a material consideration in the development process and are divided into subcategories that reflect arboricultural, landscape and cultural values. Category U trees are those which would be removed in the short term for reasons connected with their physiological or structural condition. For this reason, they should not be considered in the planning process.

- Category Grading A: Trees of high quality and value, which are in such a condition as to be able to make a substantial contribution from an arboricultural, landscape or cultural perspective;
- Category Grading B: Trees of moderate quality and value, which are in such a condition as to make a significant contribution from an arboricultural, landscape or cultural perspective;
- Category Grading C: Trees of low quality and value, which are currently in adequate condition to remain until new planting could be established or young trees with a stem diameter below 150mm; and

- Category Grading U: Trees which are in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management.

1.14. The subcategories included within the Cascade Chart for Tree Quality Assessment (1, 2 and 3) are intended to reflect arboricultural, landscape and cultural values respectively. These tree subcategories have equal weight and have been applied in response to professional opinion.

1.15. Findings for each of the individual trees and associated groups surveyed are summarised on **Plan 1: Findings of Tree Quality Survey and Root Protection Areas (2001/P38) (Sheets 1 to 5),** and contained at the rear of this report and listed individually within the Tree Survey Table at **Appendix 2**.

Preliminary Management Recommendations

1.16. Any recommendations made for management of the trees (e.g. tree works) prior to the proposed development are not a detailed 'specification' for tree work and should not be considered as such.

1.17. These recommendations are proposed on the basis that they are advised and undertaken by a qualified arboricultural contractor working in accordance with best practice as, for instance, embodied in BS3998:2010 Recommendations for Tree Work, or in the European Tree Pruning Guide, published in 2001 by the Arboricultural Association and who must be listed in the Arboricultural Association's Approved Contractors Directory *www.trees.org.uk.*

Limitations

1.18. The comments made are based on observable factors present at the time of inspection and are based on maximising the trees' safe life expectancy given their existing context. Although the health and stability of trees in the pre-development context is an integral part of their suitability for retention, it must be stressed that this report is not a tree risk assessment and should not be construed as such. While every attempt has been made to provide a realistic and accurate assessment of the trees' condition at the time of inspection, it may have not been appropriate, or possible, to view all parts or all sides of every tree to fulfil the assessment criteria of a risk assessment.

1.19. No tree is entirely safe, given the possibility that exceptionally strong winds could damage or uproot even a mechanically 'perfect' specimen. It is therefore usually accepted that hazards are only recognisable from distinct defects or from other failure-prone characteristics of the tree or the Site.

1.20. Assessment of the potential influence of trees upon buildings or other structures resulting from the effects of trees upon shrinkable load-bearing soils or the effects of incremental root or branch growth, are specifically excluded from this report.

1.21. All measurements are metric and approximate.

1.22. This report does not assess the hedgerows against the provisions of the 1997 Hedgerow Regulations, as this is dealt with specifically within the respective heritage and ecology technical reports.

Un-assessable Risks

1.23. Any alteration to the application site or development proposals could change the current circumstances and may invalidate this report and any recommendations made.

1.24. The Wildlife and Countryside Act (WCA) 1981 (as amended) makes it an offence to disturb nesting birds or recklessly endanger a bat or its roost. Bats are also a European protected species and are additionally protected under the Conservation (Habitats & c) Regulations 1994 (as amended).

1.25. A lack of recommended work does not imply that a tree does not pose an unacceptable level of risk and, likewise, it should not be implied that a tree will present an acceptable level of risk following the completion of any recommended work.

Section 2: Findings of the Tree Survey

Site Description

2.1. The site comprises nine pastoral fields separated by generally un-managed agricultural hedgerows with occasional scattered trees, and a cricket pitch formed by amenity grassland and a trimmed hedgerow boundary to the west. Overall, the hedgerows are gappy in places, with some denser and self-seeded vegetation associated with a central watercourse (Higgins Brook).

2.2. The site is bordered by residential development and a Sainsbury's supermarket to the south, Chipping Lane to the west and by further pastoral land to the north and east.

2.3. Topographically the site has localised undulations, with ground levels rolling gently north-west to south-east from approximately 103m AOD (Above Ordnance Datum) to approximately 120m AOD.

2.4. A total of 31 individual trees were surveyed along and 14 groups, as shown on **Plan 1: Findings of Tree Quality Survey and Root Protection Areas (2001/P38** to **P42) (Sheets 1 to 5)**, located to the rear of this report.

Planning Context

2.5. The consultation response for the detailed application (Phil Johnson – Countryside Officer, dated 27th June 2014) stated that the 3 trees fronting Chipping Lane would be inspected further, with a view to placing them under a TPO. At the time this report was produced, the landowner had received no notification to-date, that suggests these trees have been formerly protected.

2.6. The site is also located beyond the adjoining Conservation Area.

2.7. None of the trees surveyed are contained upon the National Inventory of Ancient Woodland or listed on the Woodland Trust's Ancient / Veteran Tree Database.

2.8. Policy protection is in the form of Policy ENV13: Landscape Protection (Ribble Valley Districtwide Local Plan (adopted 1998)); and, Policy DME1: Protecting Trees and Woodland (Core Strategy 2008-2028 A Local Plan for Ribble Valley).

2.9. This survey has also been undertaken with acknowledgement of the Ribble Valley Borough Council 'Supplementary Planning Policy for Trees'.

Species Composition

2.10. A total of 17 principal species were recorded and these included:

- Alder *(Alnus glutinosa)*;
- Ash (*Fraxinus excelsior*);
- Sycamore *(Acer pseudoplatanus)*;
- Hawthorn *(Crataegus monogyna)*;
- Blackthorn *(Prunus spinosa)*;

- Crack Willow *(Salix fragilis)*;
- White Willow *(Salix alba)*;
- Pedunculate Oak *(Quercus robur)*;
- Beech *(Fagus sylvatica)*;
- Hazel (*Corylus avellana);*
- Holly *(Ilex sp.);*
- Elder (*Sambucus sp.);*
- Field Maple *(Acer campestre)*;
- Whitebeam *(Sorbus aria)*;
- Ornamental Cherry *(Prunus sp.)*;
- Birch *(Betula pendula)*; and
- Lawson's Cypress (*Chamaecyparis lawsoniana*).

Health, Physiological and Structural Condition

2.11. The survey involved ground level examination of the external features of the trees. Growing conditions were noted together with the presence of dead branch wood, die-back and any fungal fruiting bodies or obvious signs of decay. The findings of the survey are summarised in the table below:

Physiological and Structural Condition
Poor – 6%
Fair-Poor – 10%
Fair – 29%
Fair-Good – 35%
Good – 20%

2.12. Of the trees surveyed the majority were found to be in a fair / fair-good good physiological and structural condition. Typical observations recorded the general presence of deadwood and minor dieback in some of the trees, most of which appeared to be age related or as a result of minor limb failure. The Alder within the gappy and defunct hedgerows to the north (G10, G11 and G11a) exhibited signs of poorer vitality, with several canopies appearing to have been 'blown-out' and some minor cavities visible.

2.13. No serious disease, exudates or fruiting fungal bodies were recorded during the visual survey.

2.14. Cavities and bat potential has been assessed separately within the Tyler Grange Ecological Assessment report.

Age Class

2.15. The findings of the survey are summarised below:

Age Class
Sapling – 3%
Young – 13%
Young-Mature – 33%
Mature – 51%

2.16. The majority of the tree stock (predominantly the hedgerow root stock) can be classified as mature in terms of age class (50-60+ years). Many of the mature trees are associated with field enclosure and ditch alignment.

2.17. It should be noted that with a significant proportion of the hedgerow trees being within the final third of their life span, new tree planting and hedgerow supplementation should be considered to provide a continued tree presence as part of longer term management proposals for on-site tree stock.

Category Grading

2.18. The findings of the survey are summarised below:

Category Grading	
Quality Class A – 12%	Quality Class B – 37%
Quality Class C – 49%	Quality Class U – 2%

2.19. Of the hedgerow trees surveyed, a large proportion were classified as Category C, considered to be of low to fair value, with the majority of the remaining trees being classified as Category B reflecting the overall moderate quality of the tree stock. Some of the more open grown trees were considered to represent Category A, given the visual presence and relative rarity within this transitional landscape.

2.20. The category grades are linked mainly to arboricultural and landscape sub criteria (BS5837:2012 subcategories).

Section 3: Outline Development Implications

Root Protection Areas

3.1. The other purpose of **Plan 1 (Sheets 1** to **5)** (**2001/P38** to **P42**) and **Appendix 4** is to show the influence that the existing trees have upon adjacent land and upon any future development proposals. The approximate extent of Root Protection Areas (RPAs) have been illustrated to represent the worst case concentric area that should be left undisturbed around any retained tree in order to avoid damage to roots or the rooting environment.

3.2. The RPAs have been calculated in accordance with the methodology set out in BS5837: 2012, using the stem diameter dimensions obtained during the site visit. In terms of the individual trees, T30 (Oak) has the largest theoretical RPA (11.3m radius off-set / 399.8m²).

3.3. This should be considered in association with existing above and below ground constraints. Also, the current and ultimate height of any tree needs to be appreciated in terms of its size, dominance, shade and movement in strong winds. Existing and future branch spread must therefore be taken into account as part of the reserved matters and detailed design process.

Impact of Proposed Development & Access Options on the Trees

3.4. Given the consideration of the existing agricultural context of the site, it is likely that the proposed outline development parameters will have an impact upon some of the tree stock and hedgerows surveyed (with the possible loss of approximately 445 metres of hedgerow). The wider site to the north will remain largely unaffected by the placement of the relocated cricket pitch and associated ecological mitigation and enhancement areas.

3.5. Where possible, detailed design and highways layout should minimise hedgerow loss by utilising existing access points and ditch crossings.

3.6. The following implications are predicted in relation to the indicative development layout illustrated at **Appendix 3**:

Tree No. / Species	Quality Class	Description of Loss
T1 – Sycamore	A1	Direct conflict with proposed access visibility splay on Chipping Lane.
T2 – Ash	A1	Direct conflict with proposed access visibility splay on Chipping Lane.
T3 – Ash	B1	Direct conflict with proposed access visibility splay on Chipping Lane.
G2 – Hawthorn, Blackthorn, Elder and Holly (including taller Ash tree within ditch)	C2	Direct conflict with internal access road and required culvert works associated with the ditch crossing.
G3 - Hawthorn, Blackthorn, Elder and Holly (avoiding larger Oak and Willow)	C2	Proposed internal highway route will try to utilise existing field gaps or breaks in vegetation; however, some additional localised loss of hedgerow is predicted to implement culvert works and enable necessary visibility.

Tree No. / Species	Quality Class	Description of Loss
G4 – Hawthorn, Elder, Blackthorn	C2	Proposed internal highway route will result in the loss of a short section of hedgerow, but avoid larger Holly.
G5 – Hawthorn dominated	C2	Proposed internal highway route will try to utilise existing field gaps or breaks in vegetation; however, some additional localised loss of hedgerow is predicted.
G12 – Hawthorn and Holly dominated	C2	The internal highway route will try to utilise existing field gaps or breaks in vegetation; however, access is required through G12 in up to 3 locations so localised loss in predicted.
G13 – Scattered Hawthorn	C2	Proposed internal highway route will try to utilise existing field gaps or breaks in vegetation to the north; however, some additional localised loss of hedgerow is predicted.

3.7. The most notable loss relates to the flailed hedgerow along the eastern side of Chipping Lane and three young-mature trees (T1, T2 and T3) removed in order to achieve the proposed highway access and for implementing visibility splays at the principal entry point to the development. A small section of hedgerow to the north will also be lost to a secondary access, but the Sycamore tree could be retained (T12). In the absence of mitigation this would potentially trigger planning polices both within the NPPF and local planning policy ENV 13 which seeks to protect important landscape features including hedges and their associated features.

3.8. However, the loss of hedge lengths and individual trees will be compensated by providing new species-rich hedgerow planting within the site totalling approximately 1,264 metres. This seeks to augment retained habitats and enhance connectivity between similar habitats present on adjacent land. Individual light standard and heavy standard native tree planting is also proposed, with tree numbers exceeding 200 across the application area, and with many more areas of whip plantation.

3.9. The revised scheme layout has resulted in a slight improvement to predicted tree loss in association with G14, as the development cell to the east is no longer included, hence access through G14 is no longer required.

3.10. This predicted tree loss and associated compensation/mitigation measures have also been considered within the separate Ecological Assessment (**TG Ref: 2001/R08b**).

Tree Protection Measures

3.11. All trees to be retained as part of the development proposals will be protected from unnecessary damage during the construction process. Tree protection on development sites is of paramount importance if they are to be retained successfully. The inevitable stress caused by development near existing trees can, if provision for adequate protection is not made, be a strain that can severely damage the trees or even result in their death.

3.12. A full Arboricultural Impact Assessment (AIA) and Arboricultural Method Statement (AMS), detailing measures for tree protection and sensitive working, would be prepared in relation to a fixed layout and the discharge of reserved matters.

Appendix 1: Tree Survey Explanatory Notes

Appendix 1: Tree Survey Explanatory Notes

Tree Numbers

'T' prefixes have been used to identify individual trees and commence with 'T1'.

'G' prefixes have been used to identify groups of trees.

Species

Species are listed by their common name, both in the schedule and in the report text.

Height and Stem Diameter

Tree heights are measured in metres (m). The stem diameter of single stemmed trees is measured at 1.5m above ground level and given in millimetres (mm). The diameter measurement of multi-stemmed trees is taken immediately above the root flare.

Crown Spread and Height of Crown Clearance

This is the height above ground in metres of the attachment point of the first significant branch, or the height to which the lowest (living) branch reaches; whichever is the lower. Radial crown spread is measured in metres and is listed for each of the four cardinal points. The canopy shape for individually surveyed trees depicted on the accompanying plans accurately represents the canopy spread as measured on-site.

Age Class

The age of each tree is defined as follows:

Y Young - within the first third of life expectancy;

YM Young Mature - within the second third of life expectancy;

M Mature - within the last third of life expectancy;

OM Over mature - Tree in decline; and

V Veteran – tree that, by recognised criteria, shows features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species' concerned. For the purpose of this report the term 'ancient tree' and 'veteran tree' are interchangeable.

Physiological and Structural Condition

The physiological or structural condition of each tree is defined as either; good, fair, poor or dead. For each tree, where appropriate, notes on the structural integrity are provided on form, taper, forking habit, storm damage, decay, fungi, pests, etc.

Estimated Remaining Contribution (ERC) in Years

The Estimated Remaining Contribution (ERC) for each tree is based on species and existing and apparent physiological and structural condition of the tree. The ERC may affect the proposed development layout, since the longer the tree is likely to live the greater the contribution it will make and the greater the need for retention.

TREES FOR REMOVAL		
Category and Definition	**Criteria**	**Identification on Plan**
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 (i.e. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning). • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline. • Trees infected with pathogens of significance to the health and/or safety of other trees nearby or very low quality trees suppressing adjacent trees of better quality. (**NOTE**: Category U trees can have existing or potential conservation value which it might be desirable to preserve)	DARK RED

TREES TO BE CONSIDERED FOR RETENTION				
Category and Definition	**Criteria - Subcategories**			**Identification on Plan**
	1. Mainly Arboricultural Values	**2. Mainly Landscape Values**	**3. Mainly Cultural Values, including Conservation**	
Category A **Trees of high quality** with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue).	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture).	LIGHT GREEN

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 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 benefits.	MID BLUE
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	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 temporary/transient landscape benefit.	Trees with no material conservation or other cultural value.	GREY

Appendix 2: Tree Survey Table

Appendix 2: Tree Survey Table

No	Species	Height (m)	Stem Diameter (mm)	Branch Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	Estimated Remaining Contribution (Years)	Category Grading	Preliminary Management Recommendations	Root Protection Area msq (and off-set radius in metres from stems)
				N	S	E	W								
T1	Sycamore	11.5	490	4.0	5.0	6.0	5.5	2.5	M	Fair – Good	Fair – Good	20 +	A1		(5.88)
Notes: Ivy clad, slight east bias. Crown lifted to roadside. Minor deadwood in mid canopy.															
T2	Ash	12.0	710	7.0	8.0	9.0	4.0	3.0	M	Fair – Good	Fair – Good	20 +	A1	Monitor union.	(8.52)
Notes: Roadside tree. Split at 3.0m (leader union). Two principal leaders. Ivy clad, east bias (crown bias also). Deadwood and dieback in lower east crown.															
T3	Ash	8.0	430	4.0	4.5	6.5	5.0	2.0	Y – M	Fair	Fair	10 – 20	B1	Monitor union.	(5.16)
Notes: Neat, round canopy formed by two principal leaders. Union split from 1.8m.															
T4	Ash	Est. 7.0	Est.360	5.0	5.5	6.5	6.0	3.0 +	Y – M	Fair – Good	Fair – Good	20 +	B1		(4.32)
Notes: Off site, ivy clad, slight west bias. Three principal leaders. Minor dieback in lower canopy.															
G1	Hawthorn, Blackthorn, Elder, Holly	Up to 5.5	Average 120	-	-	-	-	N/a	Y – M	Fair – Poor	Fair – Poor	10 – 20	C2	Re-stock and manage.	(1.44)
Notes: Far side of ditch, next to Sainsbury's service area. Typical unmanaged hedgerow.															
T5	Alder	8.0	500	5.5	6.0	8.0	2.0	3.0 +	M	Fair	Fair	10 – 20	C2	Monitor rot hole.	(6.10)
Notes: Eastern canopy bias. Basal and stem cavity at 90cm. Minor decay and basal exudates.															
T6	Ash	9.0	- 500 - 410 - 400	9.0	10	6.5	7.0	1.5m	M	Fair	Fair	10 – 20	B2	Monitor union.	(7.60)
Notes: Three stems/one bole. Sprawling canopy formed by three union split at bole. Lower pruning evident.															

No	Species	Height (m)	Stem Diameter (mm)	Branch Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	Estimated Remaining Contribution (Years)	Category Grading	Preliminary Management Recommendations	Root Protection Area msq (and off-set radius in metres from stems)
				N	S	E	W								
T7	Ash	5.5	520	4.5	3.5	7.0	3.0	N/a	M	Fair – Poor	Fair – Poor	10 – 20	C2	Retention optional.	(6.24)
Notes: Significant bias to north east. Deadwood and dieback with small rot holes in principal leader.															
G2	Ash, Holly, Hawthorn, Blackthorn, Elder	Up to 7.5	Av.180	-	-	-	-	N/a	Y – M	Fair	Fair	20 + if managed	C2	Re-stock and manage.	(2.16)
Notes: Typical internal hedge and ditch. Unmanaged, scattered trees. Ok screen. Gappy centre and significant leaning Ash. Most northerly Ash conflict with power lines.															
G3 G3a	Hawthorn, Blackthorn, Elder, Holly	Up to 5.5m	Av. 100	-	-	-	-	N/a	M	Fair	Fair	20 +	C2	Re-stock and manage.	(1.20)
Notes: Typical ditch/hedgerow. Hawthorn dominated. Conflicting canopies in places. Scattered trees throughout.															
T8	Sycamore	7.5	330	5.5	5.5	5.0	6.0	N/a	Y – M	Fair – Good	Fair – Good	20 +	B2		(3.96)
Notes: Vigorous upright tree on ditch-side of watercourse. Tight canopy.															
T9	Alder	10.0	- 400 -200 -180 -170 -380 -420	7.0	7.0	6.5	7.0	N/a	M	Fair – Good	Fair – Good	20 +	B2	Monitor union	(7.40)
Notes: At ditch meander. Large multi stem bole. Six leaders, weak union, sprawling canopy. Some pruning evident. Nice tree.															
T10	Elder	9.0	- 340 - 480 - 310	5.0	6.0	6.0	6.0	N/a	M	Fair	Fair	20 +	B2		(6.60)
Notes: Multi stem bole located on ditch-side. Some root wash and crossing leaders.															
T11	Alder	9.0	X 8 -180 each	6.5	6.5	5.5	5.5	N/a	M	Fair	Fair	20 +	B2		(5.10)
Notes: Ditch-side multi stem with some crossing leaders.															

No G9 G9a	Species	Height (m)	Stem Diameter (mm)	Branch Spread (m)-				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	Estimated Remaining Contribution (Years)	Category Grading	Preliminary Management Recommendations	Root Protection Area msq (and off-set radius in metres from stems)
				N	S	E	W								
G4	Hawthorn,	Up to 5.0	Av.80	-	-	-	-	N/a	YM – M	Fair	Fair	10 – 20	C2	Manage and re-stock	(0.96)
	Elder Blackthorn, Holly														
Notes: Slightly narrower hedge and shallow ditch. Dominated by Hawthorn, Elder, Blackthorn and forming typical enclosure. One taller hawthorn – 4 stem at 160 dbh to east.															
G5	Hawthorn, Blackthorn, Elder	Up to 5.0	Av. 90	-	-	-	-	N/a	YM – M	Fair	Fair	10 – 20	C2	Manage and re-stock.	(1.08)
Notes: As G.4 – typical hedgerow and ditch enclosure. Hawthorn dominated. Slightly denser, previously managed. Decent low level screen. Gaps at either end.															
G6	Birch, Cypress, Sorbus, Cherry, Field Maple	Up to 10.5	Max. 210					N/a	Y – YM	Fair – Poor	Fair – Poor	20 +	C2		(1.32/2.52)
Notes: Off-site ornamental planting belt associated with Sainsbury's and standalone boundary Cypress trees.															
G7	Ash, Willow, Hawthorn, Blackthorn	Up to 11.5	Max. 360	-	-	-	-	N/a	M	Fair	Fair	20 +	C2		(4.08)
Notes: Dry depression group dominated by double stemmed mature Ash with some visible knot holes.															
G8	Hawthorn, Alder, Holly	Up to 7.5	Max. 120	-	-	-	-	N/a	M	Fair	Fair	20 +	C2	Management required.	(1.44)
Notes: Typical enclosure with some gaps. Would respond well to on-going management.															
G9 G9a	Willow, Ash, Hawthorn, Blackthorn	Up to 11.5	Max. 410	-	-	-	-	N/a	M	Fair	Fair	20 +	C2		(4.92/3.72)
Notes: Group of four more prominent Willow associated with field pond with understorey hedgerow. Some evidence of deadwood and contorted form, minor root wash or damage from grazing animals.															

No	Species	Height (m)	Stem Diameter (mm)	Branch Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	Estimated Remaining Contribution (Years)	Category Grading	Preliminary Management Recommendations	Root Protection Area msq (and off-set radius in metres from stems)
				N	S	E	W								
G10	Hawthorn, Alder, Ash, Beech	Up to 8.5	Max. 210	-	-	-	-	N/a	M	Fair	Fair	20 +	C2	Re-stock and manage	(2.52)
Notes: Alder dominated gappy hedgerow.															
G11 G11a	Hawthorn, Alder, Ash	Up to 9.5	Max. 330	-	-	-	-	N/a	M	Fair	Fair	20 +	C2	Re-stock and manage	(3.60)
Notes:															
T12	Ash	9.5	380	4.5	5.0	5.0	6.0	1.9	YM	Fair-Good	Fair-Good	20+	B1	-	65.3 (4.60)
Notes: Forks with weak union at 2.2m. Bias to west and cavity wound to east. Pruned back in association with cricket club pitch. Minor deadwood in lower canopy.															
T13	Oak	11.0	560	7.5	8.0	8.0	8.5	N/a	M	Good	God	20+	A1	-	141.9 (6.70)
Notes: Nice hedgerow tree with rounded canopy, growing at ditch junction.															
T14	Ash	8.0	- 320 - 230	4.5	7.0	6.5	6.0	N/a	YM	Fair	Fair	20+	B1	-	48.8 (3.90)
Notes: Ditch side tree with neat compact canopy, formed by two leaders from bole. Average vitality and some deadwood at base.															
T15	Ash	7.5	- 190 - 260 - 320	5.5	4.0	6.5	4.0	2.0+	M	Fair-Poor	Fair-Poor	10-20	C1	Retention optional	64.8 (4.50)
Notes: North west bias, multi-stem tree on ditch side with crossing laterals and minor decay.															
T16	Ash	7.0	930 bole	6.0	6.0	6.5	6.0	N/a	YM	Fair-Poor	Fair-Poor	10-20	C1	Monitor cavity	271.8 (9.30)
Notes: Ditch side tree with multi-stem bole and sprawling canopy. Basal cavity evident but no notable decay. Some deadwood and dieback in lower canopy.															
G12	Hawthorn Holly	Up to 5.5	Av. 90	-	-	-	-	N/a	M	Fair	Fair	10-20	C2	Re-stock and mange	(1.10)
Notes: Hedge associated with slightly deeper section of ditch. Single row, rather gappy in places albeit with some previous management evident.															

No	Species	Height (m)	Stem Diameter (mm)	Branch Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	Estimated Remaining Contribution (Years)	Category Grading	Preliminary Management Recommendations	Root Protection Area msq (and off-set radius in metres from stems)
				N	S	E	W								
T17	Willow	14.0	780	7.0	5.5	7.5	6.5	3.0+	M	Good	Good	20+	A1	-	275.3 (9.40)
Notes: Taller tree with westerly bias growing at edge of pond.															
T18	Willow	12.5	480	5.5	6.5	5.5	6.0	3.0+	M	Fair-Good	Fair-Good	20+	B1	-	104.2 (5.80)
Notes: Easterly bias.															
T19	Willow	13.0	500	6.0	7.0	7.0	5.5	3.0+	M	Fair-Good	Fair-Good	20+	B1	-	113.1 (6.00)
Notes: South easterly bias and good vitality overall, although canopy compressed to the west.															
T20	Willow	12.0	680	5.5	6.0	8.5	3.0	3.0+	M	Fair-Good	Fair-Good	20+	B1	Monitor cavity	209.2 (8.20)
Notes: Significant south easterly bias and stem cavity.															
T21	Willow	14.0	810	6.0	6.5	7.0	6.5	3.0+	M	Good	Good	20+	A1	-	296.9 (9.70)
Notes: Upright tree with good form and vitality.															
T22	Willow	11.5	280	4.0	3.0	3.0	3.5	2.5	M	Fair	Fair	10-20	C1	Retention optional	35.5 (3.40)
Notes: Split stem and crossing laterals.															
T23	Willow	9.5	330	4.5	6.5	6.0	3.5	2.00	M	Fair	Fair	10-20	C1	Retention optional	49.3 (4.00)
Notes: Significant northerly bias.															
T24	Oak	8.0	560	7.0	7.0	7.0	6.0	3.0+	M	Good	Good	20+	A1	-	141.9 (6.10)
Notes: Main stem has westerly bias. Nice rounded canopy with slight stag-heading.															

No	Species	Height (m)	Stem Diameter (mm)	Branch Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	Estimated Remaining Contribution (Years)	Category Grading	Preliminary Management Recommendations	Root Protection Area msq (and off-set radius in metres from stems)
				N	S	E	W								
T25	Ash	7.0	520	5.5	5.0	7.0	6.0	3.0+	M	Good	Good	20+	A1	-	122.3 (6.20)
Notes: Nice rounded canopy growing on side of wet ditch. Two principals leaders fork at 2.8m.															
G13	Hawthorn	6.0	Av. 180	-	-	-	-	N/a	M	Fair	Fair	10-20	C2	Re-stock and manage	(2.20)
Notes: Rather scattered / defunct hedgerow associated with shallow ditch. Dead tree to north.															
G14	Hawthorn Holly	Up to 5.5	Av. 90	-	-	-	-	N/a	M	Fair	Fair	10-20	C2	Re-stock and mange	(1.10)
Notes: Hedge associated with slightly deeper section of ditch. Single row, rather gappy in places albeit with some previous management evident.															
T25a	Ash	8.5	410	6.0	6.5	6.0	6.5	3.0+	M	Fair	Fair	10-20	B1	-	76.1 (4.90)
Notes: Edge of pond tree with upright form and fair canopy vitality. Some dieback in lower canopy and deadwood at base.															
T26	Oak	7.0	460	7.0	6.0	3.0	3.5	3.0+	M	Fair-Poor	Fair-Poor	10-20	C1	Major cavity – monitor	95.7 (5.50)
Notes: North easterly bias, with hanging deadwood and major stem cavity.															
T27	Oak	8.0	520	5.5	6.0	5.5	5.0	3.0+	M	Fair-Poor	Fair-Poor	10-20	C1	Monitor cavity	122.3 (6.20)
Notes: Dead lateral branch and minor cavity. Retain in favour of T26.															
T28	Alder	6.0	310	3.0	4.5	3.0	3.0	3.0+	M	Fair-Poor	Fair-Poor	10-20	C1	Retention optional	43.5 (3.70)
Notes: Growing on pond margin with roots submerged. Contorted form with sparse canopy and southerly bias.															
T29	Alder	-	-	-	-	-	-	-	-	-	-	-	U	-	-
Notes: Dead.															

No	Species	Height (m)	Stem Diameter (mm)	Branch Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	Estimated Remaining Contribution (Years)	Category Grading	Preliminary Management Recommendations	Root Protection Area msq (and off-set radius in metres from stems)
				N	S	E	W								
T30	Oak	7.0	940	6.0	6.5	7.5	7.0	3.0+	M	Fair	Fair	20+	B1	Monitor stem decay	399.8 (11.30)
Notes: Easterly bias, sprawling canopy associated with existing gateway. Rather stunted canopy but large central stem. Southerly lateral branch previously removed. Some minor decay within main stem.															
T31	Oak	8.5	710	7.0	6.0	8.0	6.5	3.0+	M	Fair	Fair	20+	B1	Monitor	228.1 (8.50)
Notes: Significant easterly bias. Some minor decay and leader union (@3.2m). Deadwood in mid canopy and dieback in easterly lateral branch.															
T32	Oak	8.0	560	6.5	8.0	6.0	5.0	3.0+	M	Fair-Good	Fair-Good	20+	A1	-	141.9 (6.70)
Notes: Large tree on ditch side near existing culvert exit. Partly stag-headed, with some lower branch dieback and some fused lateral branches.															

Appendix 3: Revised Illustrative Masterplan (Ref: 013-008-008 Rev F)

e*SCAPE urbanists

Project Title
Higgins Brook, Longridge

e*SCAPE Job No.
013-008

Client
Barratt Homes

Drawing Number
013-008-P008

Revision
REV F

Drawing Title
Illustrative Masterplan/ Indicative Layout

Scale
1:1,250 @ A1

Date
Feb'15

Appendix 4: Development Implications - Overlay of Revised Illustrative Masterplan

Key

- Category A - Trees of high quality and value
- Category B - Trees of moderate quality and value
- Category C - Trees of low quality and value
- Category U - Trees recommended for removal
- Application Site Boundary
- Approximate Extent of BS5837 Calculated Root Protection Areas (RPAs)
- Existing / Suitable Access Points
- Trimmed Boundary Hedge

Revision

Tyler Grange

Ladyfield House, Station Road, Wilmslow, Cheshire, SK9 1BB
t: 01625525731 www.tylergrange.co.uk

Development Implications - Overlay of Revised Illustrative Masterplan (Sheet 1 of 5)

N

0 20m

1:1250 @ A3

Project	Land at Higgins Brook, East of Chipping Lane, Longridge
Drawing No	2001/61a
Date	March 2015

Key

- Category A - Trees of high quality and value
- Category B - Trees of moderate quality and value
- Category C - Trees of low quality and value
- Category U - Trees recommended for removal
- Application Site Boundary
- Approximate Extent of BS5837 Calculated Root Protection Areas (RPAs)
- Existing / Suitable Access Points
- Trimmed Boundary Hedge

Revision

TG Tyler Grange

Ladyfield House, Station Road, Wilmslow, Cheshire, SK9 1BB
t: 01625525731 www.tylergrange.co.uk

Development Implications - Overlay of Revised Illustrative Masterplan (Sheet 2 of 5)

N

0 20m

1:1250 @ A3

Project	Land at Higgins Brook, East of Chipping Lane, Longridge
Drawing No	2001/61a
Date	March 2015

Key

- Category A - Trees of high quality and value
- Category B - Trees of moderate quality and value
- Category C - Trees of low quality and value
- Category U - Trees recommended for removal
- Application Site Boundary
- Approximate Extent of BS5837 Calculated Root Protection Areas (RPAs)
- Existing / Suitable Access Points
- Trimmed Boundary Hedge

Revision

TG Tyler Grange

Ladyfield House, Station Road, Wilmslow, Cheshire, SK9 1BB
t: 01625525731 www.tylergrange.co.uk

Development Implications - Overlay of Revised Illustrative Masterplan (Sheet 3 of 5)

N

0 20m

1:1250 @ A3

Project	Land at Higgins Brook, East of Chipping Lane, Longridge
Drawing No	2001/61a
Date	March 2015

Scattered Hedgerow
T14
T16
T15
NEAP
G14
Taller Ash
Land Retained in Agriculture
G12
Crescent
T25a
T29
T28
T26
T27
Pond
Dead Tree
G14
Holly
T30
Mews
G14
G13
T31
G14
T32
Play Area
FIRWOOD CLOSE
REDWOOD
DRIVE
HAZEL GROVE
CHAIGLEY ROAD
Willows Farm

Key

- Category A - Trees of high quality and value
- Category B - Trees of moderate quality and value
- Category C - Trees of low quality and value
- Category U - Trees recommended for removal
- Application Site Boundary
- Approximate Extent of BS5837 Calculated Root Protection Areas (RPAs)
- Existing / Suitable Access Points
- Trimmed Boundary Hedge

Revision

Tyler Grange

Ladyfield House, Station Road, Wilmslow, Cheshire, SK9 1BB
t: 01625525731 www.tylergrange.co.uk

Development Implications - Overlay of Revised Illustrative Masterplan (Sheet 4 of 5)

N

0 20m

1:1250 @ A3

Project	Land at Higgins Brook, East of Chipping Lane, Longridge
Drawing No	2001/61a
Date	March 2015

Key

- Category A - Trees of high quality and value
- Category B - Trees of moderate quality and value
- Category C - Trees of low quality and value
- Category U - Trees recommended for removal
- Application Site Boundary
- Approximate Extent of BS5837 Calculated Root Protection Areas (RPAs)
- Existing / Suitable Access Points
- Trimmed Boundary Hedge

Revision

TG Tyler Grange

Ladyfield House, Station Road, Wilmslow, Cheshire, SK9 1BB
t: 01625525731 www.tylergrange.co.uk

Development Implications - Overlay of Revised Illustrative Masterplan (Sheet 5 of 5)

N

0 20m

1:1250 @ A3

Project	Land at Higgins Brook, East of Chipping Lane, Longridge
Drawing No	2001/61a
Date	March 2015

Plans

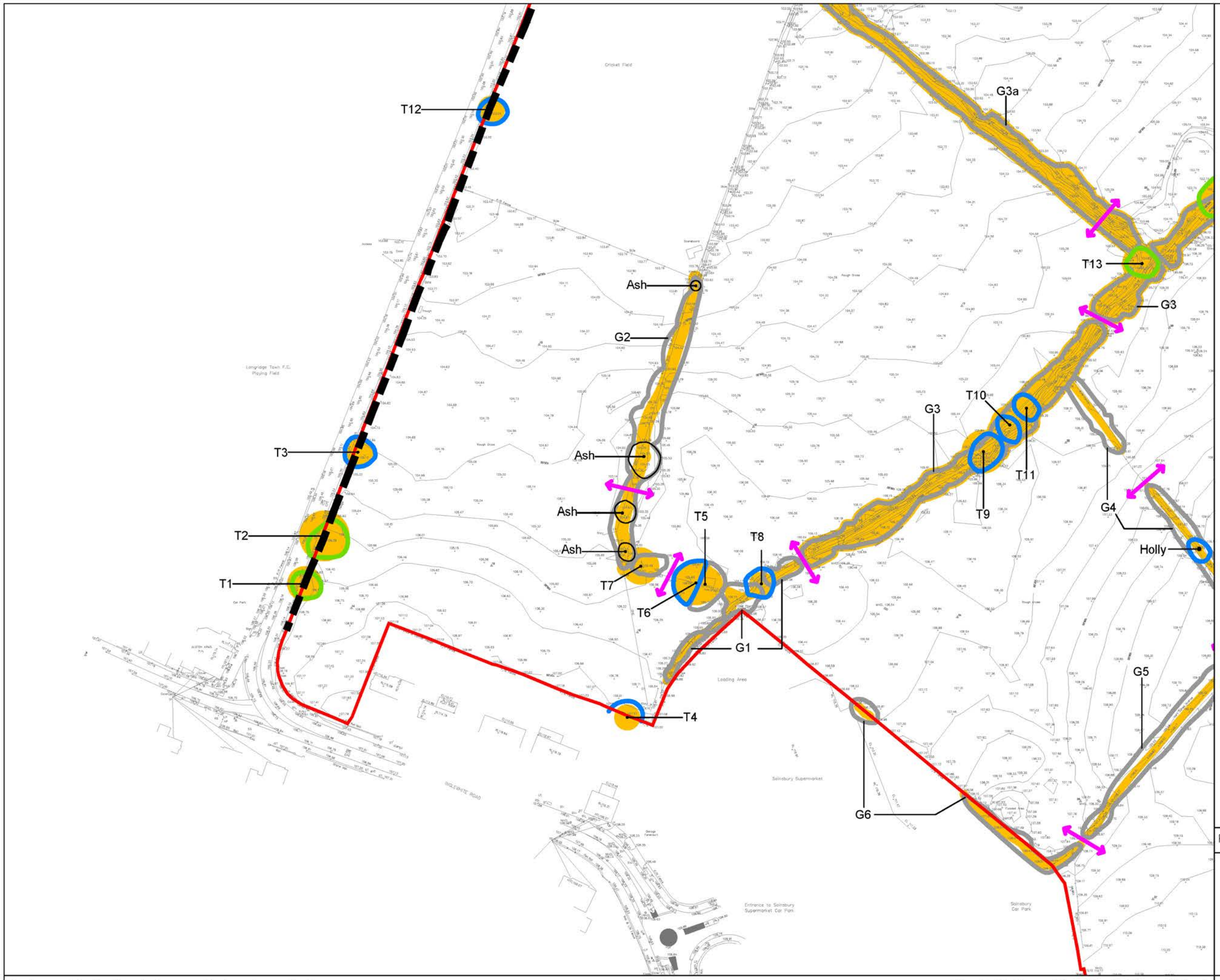
Plan 1: Findings of Tree Quality Survey & Root Protection Areas (Sheet 1 of 5) (2001/P38 August 2014)

Plan 1: Findings of Tree Quality Survey & Root Protection Areas (Sheet 2 of 5) (2001/P39 August 2014)

Plan 1: Findings of Tree Quality Survey & Root Protection Areas (Sheet 3 of 5) (2001/P40 August 2014)

Plan 1: Findings of Tree Quality Survey & Root Protection Areas (Sheet 4 of 5) (2001/P41 August 2014)

Plan 1: Findings of Tree Quality Survey & Root Protection Areas (Sheet 5 of 5) (2001/P42 August 2014)



Key

- Category A - Trees of high quality and value
- Category B - Trees of moderate quality and value
- Category C - Trees of low quality and value
- Category U - Trees recommended for removal
- Application Site Boundary
- Approximate Extent of BS5837 Calculated Root Protection Areas (RPAs)
- Existing / Suitable Access Points
- Trimmed Boundary Hedge

Revision

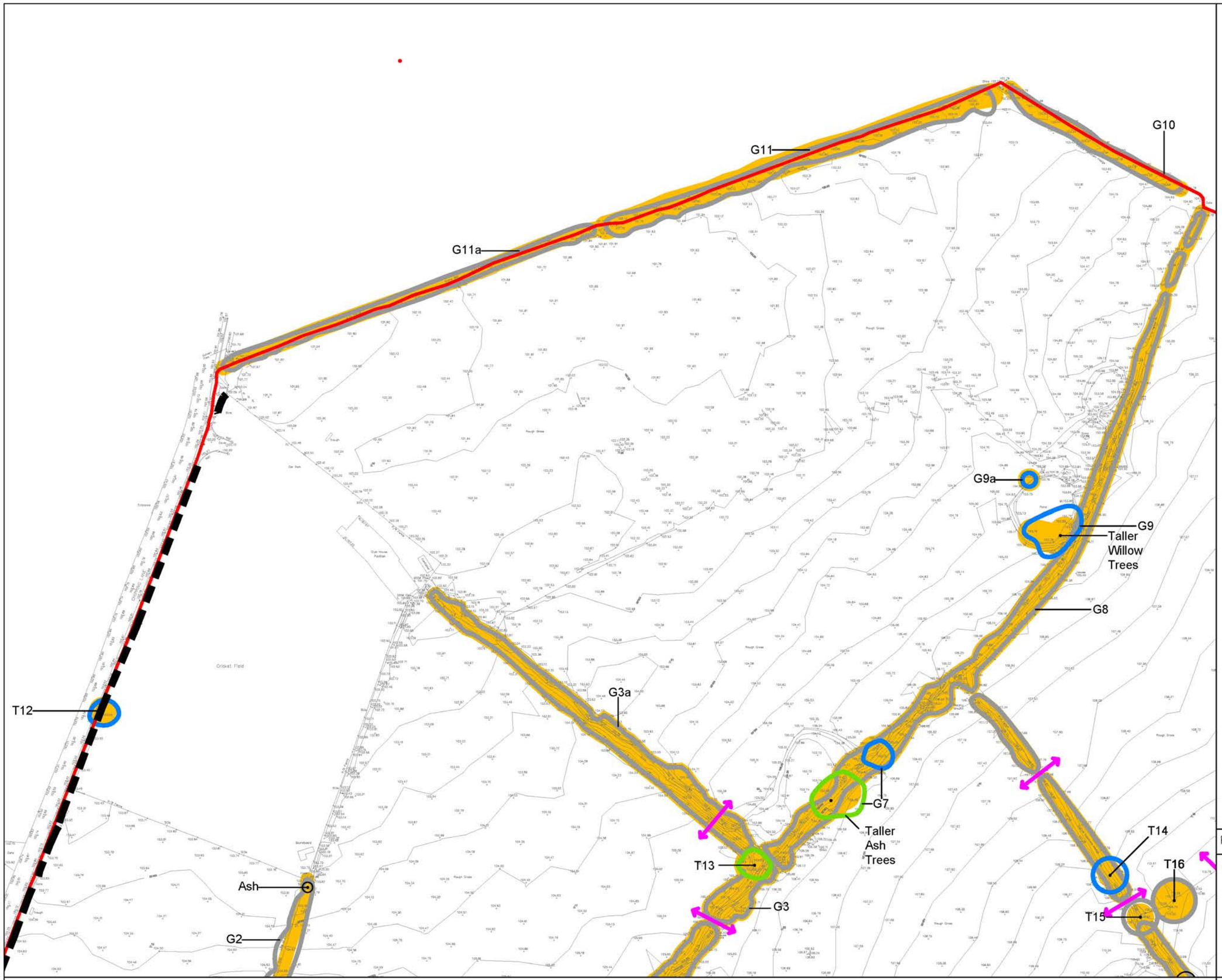
TG Tyler Grange
11 Market Place, Macclesfield, Cheshire, SK10 1EB
t: 01625 618 547
www.tylergrange.co.uk

Plan 1: Findings of Tree Quality Survey & Root Protection Areas (Sheet 1 of 5)

N

0 20m
1:1250 @ A3

Project	Land at Higgins Brook, East of Chipping Lane, Longridge
Drawing No	2001/P38a
Date	August 2014



Key

- Category A - Trees of high quality and value
- Category B - Trees of moderate quality and value
- Category C - Trees of low quality and value
- Category U - Trees recommended for removal
- Application Site Boundary
- Approximate Extent of BS5837 Calculated Root Protection Areas (RPAs)
- Existing / Suitable Access Points
- Trimmed Boundary Hedge

Revision

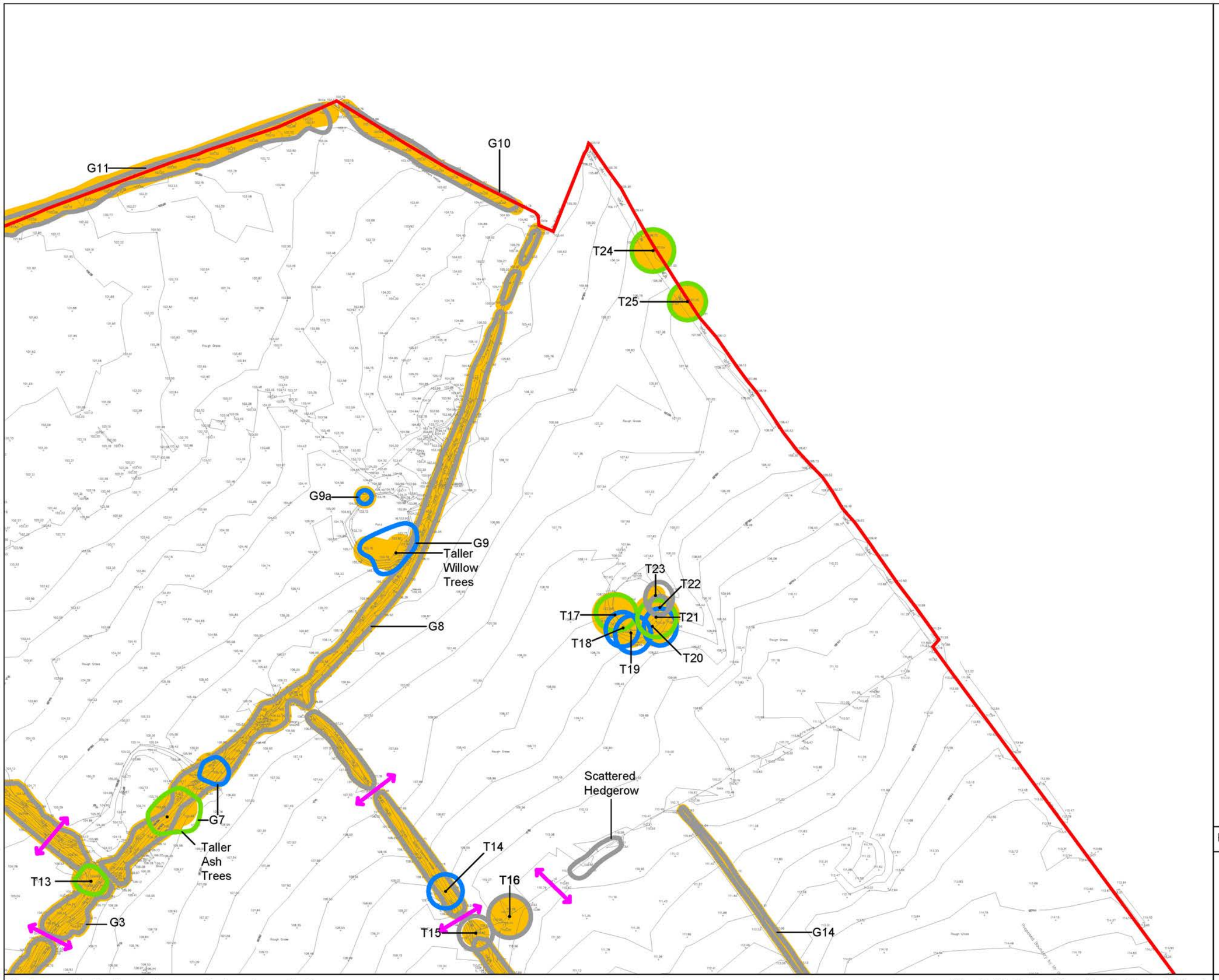
TG Tyler Grange
11 Market Place, Macclesfield, Cheshire, SK10 1EB
t: 01625 618 547
www.tylergrange.co.uk

Plan 1: Findings of Tree Quality Survey & Root Protection Areas (Sheet 2 of 5)

N

0 20m
1:1250 @ A3

Project	Land at Higgins Brook, East of Chipping Lane, Longridge
Drawing No	2001/P39a
Date	August 2014



Key

- Category A - Trees of high quality and value
- Category B - Trees of moderate quality and value
- Category C - Trees of low quality and value
- Category U - Trees recommended for removal
- Application Site Boundary
- Approximate Extent of BS5837 Calculated Root Protection Areas (RPAs)
- Existing / Suitable Access Points
- Trimmed Boundary Hedge

Revision

Tyler Grange

11 Market Place, Macclesfield, Cheshire, SK10 1EB
t: 01625 618 547
www.tylergrange.co.uk

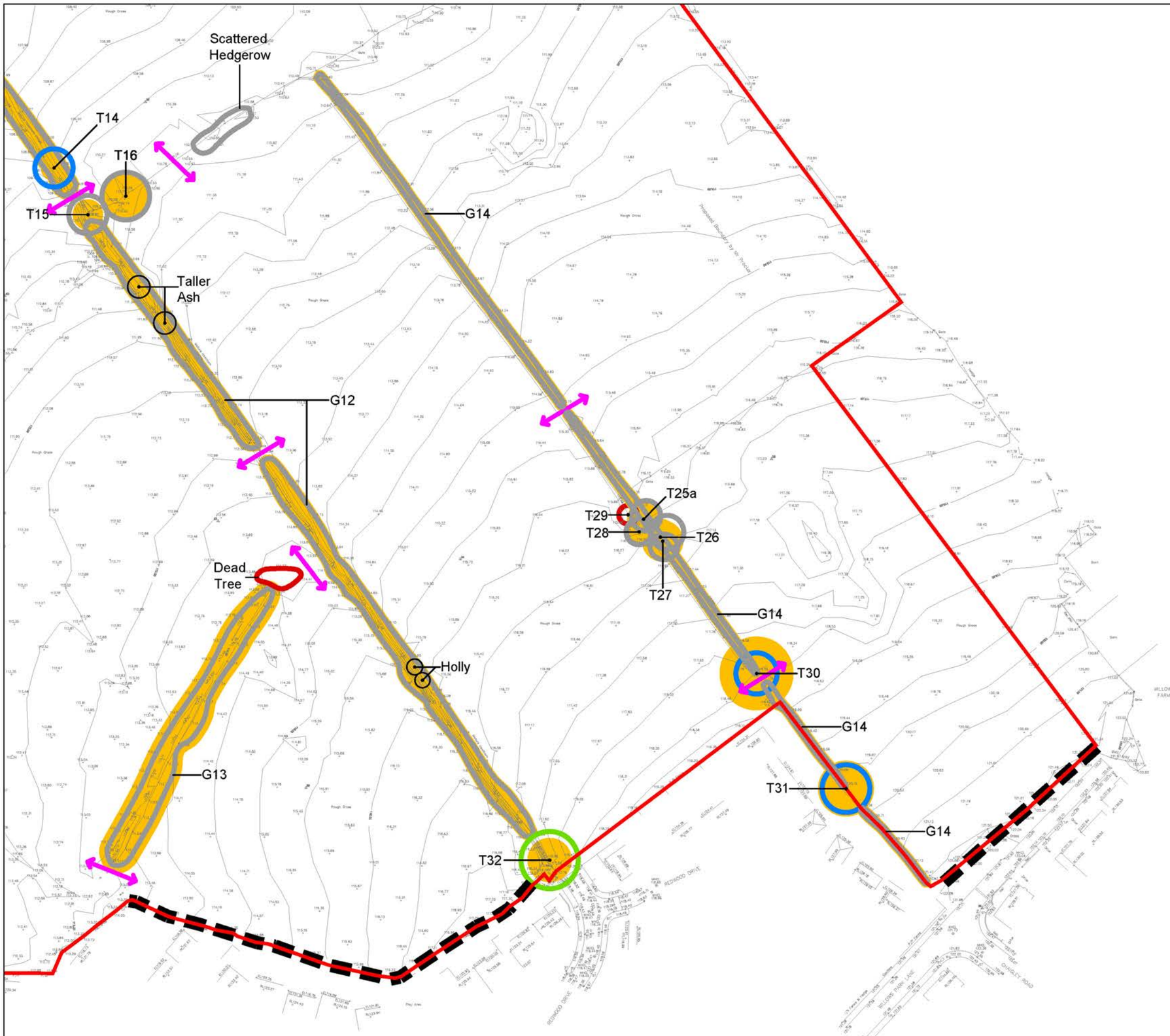
Plan 1: Findings of Tree Quality Survey & Root Protection Areas (Sheet 3 of 5)

N

0 20m

1:1250 @ A3

Project	Land at Higgins Brook, East of Chipping Lane, Longridge
Drawing No	2001/P40
Date	August 2014



Key

- Category A - Trees of high quality and value
- Category B - Trees of moderate quality and value
- Category C - Trees of low quality and value
- Category U - Trees recommended for removal
- Application Site Boundary
- Approximate Extent of BS5837 Calculated Root Protection Areas (RPAs)
- Existing / Suitable Access Points
- Trimmed Boundary Hedge

Revision

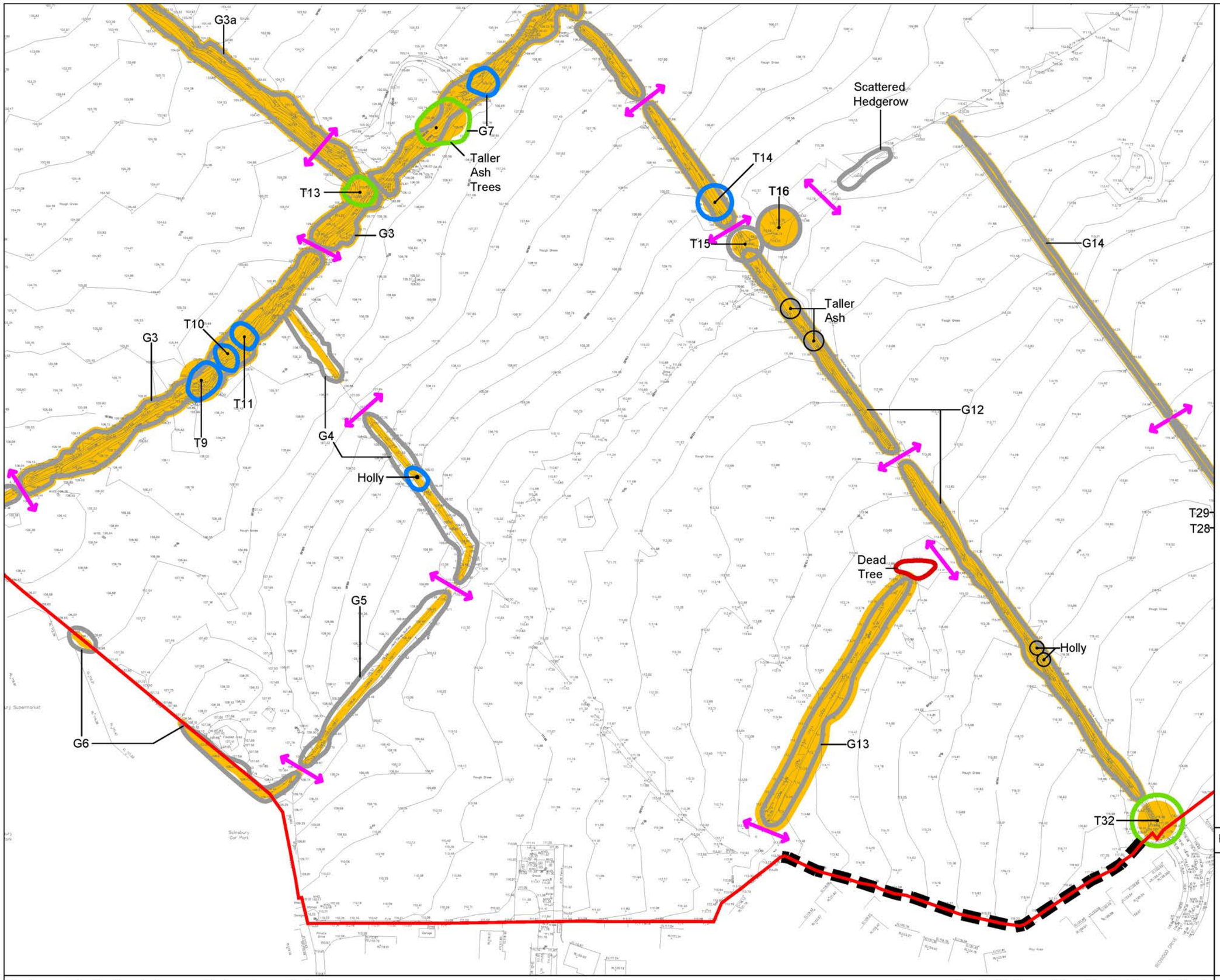
Tyler Grange
11 Market Place, Macclesfield, Cheshire, SK10 1EB
t: 01625 618 547
www.tylergrange.co.uk

Plan 1: Findings of Tree Quality Survey & Root Protection Areas (Sheet 4 of 5)

N

0 20m
1:1250 @ A3

Project	Land at Higgins Brook, East of Chipping Lane, Longridge
Drawing No	2001/P41
Date	August 2014



Key

- Category A - Trees of high quality and value
- Category B - Trees of moderate quality and value
- Category C - Trees of low quality and value
- Category U - Trees recommended for removal
- Application Site Boundary
- Approximate Extent of BS5837 Calculated Root Protection Areas (RPAs)
- Existing / Suitable Access Points
- Trimmed Boundary Hedge

Revision

Tyler Grange

11 Market Place, Macclesfield, Cheshire, SK10 1EB
t: 01625 618 547
www.tylergrange.co.uk

Plan 1: Findings of Tree Quality Survey & Root Protection Areas (Sheet 5 of 5)

N

0 20m

1:1250 @ A3

Project	Land at Higgins Brook, East of Chipping Lane, Longridge
Drawing No	2001/P42
Date	August 2014