



TRACY CLARKE
TREE CONSULTANCY

Arboricultural Impact Assessment and Method Statement

Client: 1418 Development & Consulting Ltd

Site: 38 Heathfield
Royston
Hertfordshire
SG8 5BN

Report by: Tracy Clarke MICFor. F.Arbor.A. CEnv

Date: May 2024

Reference: TCTC-19171

OUR CONTACT DETAILS:

Website: www.tracyclarke.co.uk

Email: info@tracyclarke.co.uk

Tel: 01371 811831

Tracy Clarke Tree Consultancy Ltd.

Registered Office: Fisher Michael | The Old Grange Warren Estate | Lordship Road | Writtle | Chelmsford |
England | CM1 3WT | Company No: 10781437 | VAT Registration No: 269 2078 77

Executive Summary

1. Tracy Clarke Tree Consultancy Ltd are instructed to provide an arboricultural survey and impact assessment of the proposal in accordance with BS5837 (2012), Trees in relation to design, demolition, and construction – Recommendations. The information provided to the client has helped to inform the site layout to ensure that the proposal is sustainable in respect of important arboricultural and landscape features and that it complies with national and local planning policies.
2. A total of forty four individual trees and three groups have been assessed, of these four are poor quality and value, thirty three low quality and value, and ten of moderate quality and value. There are no trees identified as high value, or of veteran / ancient status.
3. No trees will be removed to facilitate the proposal, one young tree (T33) will be relocated within the garden.
4. By following the recommendations within this report all existing trees will be retained and appropriately protected during works on site, ensuring relevant national and local planning policies will be met.
5. **Recommended Further Arboricultural Input**
 - Ensure there is a pre-start meeting with the demolition and construction contractor(s) and arboricultural consultant to agree tree protection measures and methods of work
 - Arboricultural site supervision to take place during demolition of the workshop and garage and installation of the No-dig areas of road and car parking

Contents

1	Introduction.....	1
2	Observations and Tree Information.....	3
3	Planning Policy Context.....	5
4	Discussion.....	7
5	Conclusions.....	11
	Appendix A1 – Photographs.....	12
	Appendix A2 – BS 5837 Tree Data Schedule	14
	Appendix A3 – Tree Work Schedule	15
	Appendix B1 – Tree Survey Plan	16
	Appendix B2 – Proposal Plan.....	17
	Appendix B3 – Tree Protection Plan and Heads of Terms Method Statement	18
	Appendix C – Tree Data Analysis	19
	Appendix D – Qualifications	20

1 Introduction

1.1 Tracy Clarke Tree Consultancy Ltd are instructed by 1418 Development & Consulting Ltd to:

- provide a BS 5837 (2012) tree survey of trees relevant to the site, with recommendations for works, and
- provide an arboricultural impact assessment report which addresses the impacts on trees from the proposed development for planning submission, and provides measures for their protection during construction

1.2 The proposal is for a three bedroom residential dwelling to the rear of 38 Heathfield.

Method of assessment

1.3 This assessment follows best practice British Standard 5837: Trees in relation to design, demolition, and construction (2012) which provides a methodology for the assessment of trees and other significant vegetation on development sites and aims to guide decision making towards sustainable design and tree cover on all new developments.

1.4 This assessment also has regard to national and local planning policies in consideration of the arboricultural impacts from the development proposals since these policies will guide the decision-making process of the local planning authority.

Scope and limitations

1.5 The tree survey is of a preliminary nature only; all trees have only been inspected from ground level applying ¹Mattheck's (1994) visual tree assessment method (VTA). No detailed decay investigations of the trees or detailed site investigations have been carried out to inform this report.

1.6 This report is not an assessment of tree condition and the risk they represent to people or property, however where defects trees have been noted as requiring works, recommendations are included in the tree schedule included with this report.

¹ Mattheck, C, Broeler, H. (1994). The body language of trees. A handbook for failure analysis – Research for Amenity Trees No.4 Research for Amenity Trees

- 1.7 All recommendations are given in the context of the site's current use, or to facilitate the proposed development. Trees are dynamic living organisms, and subject to a change in their condition.
- 1.8 This report should not be considered as a full assessment of the health and safety of trees on and adjacent to the site, and where trees do have the potential to harm people or property, an inspection of their condition by the relevant owner on an annual basis is recommended.
- 1.9 The assessment of trees within this report is valid for two years from its date.

2 Observations and Tree Information

The Site

- 2.1 The site was visited on 13 May 2024 to carry out a BS5837 (2012) survey and assessment of trees.

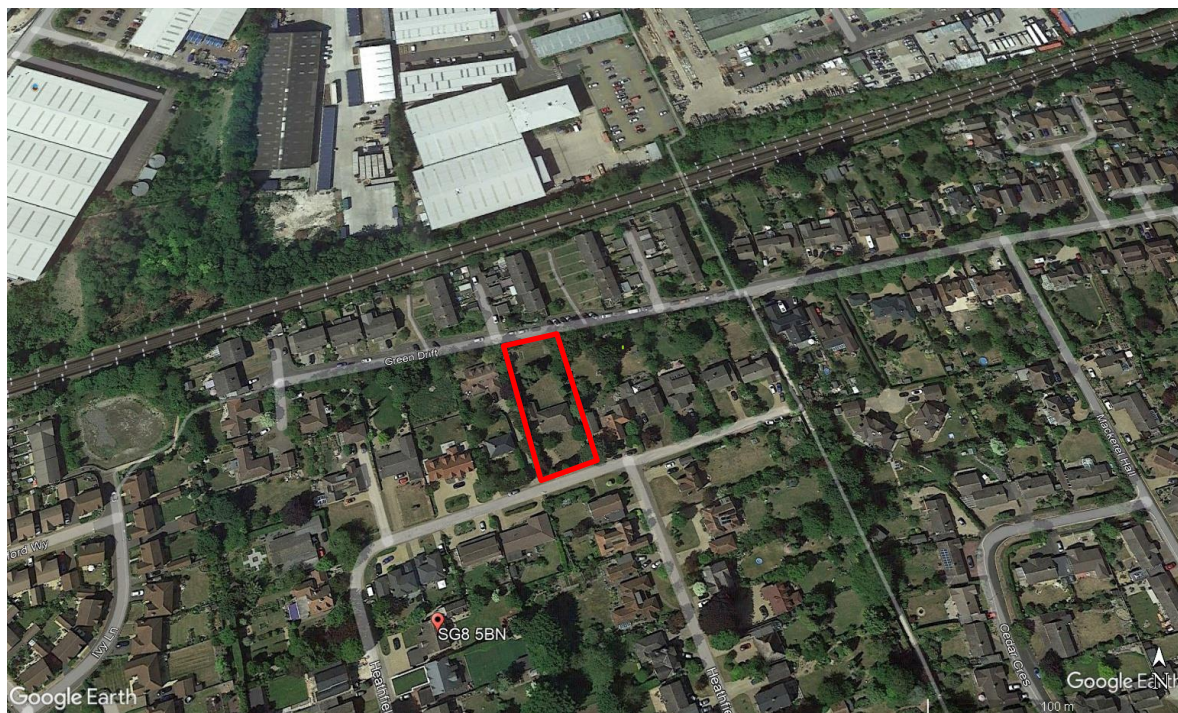


Fig. 1 Google Earth 2024 – site location

Tree data

- 2.2 Photographs of the site and trees can be found at Appendix A1
- 2.3 The data on the trees surveyed can be found in the tree schedule at Appendix A2.
- 2.4 The surveyed trees and their assessment of quality and value are indicated on the tree survey plan at Appendix B1.
- 2.5 A total of forty four individual trees and three groups have been assessed, of these four are poor quality and value, thirty three low quality and value, and ten of moderate quality and value. There are no trees identified as high value, or of veteran / ancient status.
- 2.6 The proposed layout and, where relevant, trees for removal are shown in Appendix B2.
- 2.7 The tree protection plan and heads of terms method statement is provided at Appendix B3.

- 2.8 An analysis of the tree quality and value, tree species mix and age diversity relevant to this proposal is included at Appendix C, which helps to understand the sustainability of the existing tree population on site.

Site soils and influence on rooting

- 2.9 Soil conditions will have a significant effect upon tree growth and will influence:
- The species that will grow successfully.
 - Rooting depths for different species.
 - The available soil volume that can be used by roots and therefore the likely tolerance of trees and other vegetation to soil disturbance
- 2.10 As a guide, ²Cranfield University Soilscape map describes the soils at the site as Soilscape 3; shallow lime-rich soils over chalk or limestone.
- 2.11 This is a guide only, further detailed soil analysis on site will be required by the structural engineer to inform any foundation design detail.

Legal status of trees / woodlands

- 2.12 At the time of writing the report it has not been possible to identify whether the surveyed trees are legally protected by a tree preservation order, however the North Herts online map search facility confirms the site is not within a conservation area.
- 2.13 It should be noted that prior to any works to prune or remove a tree (including roots) with a Tree Preservation Order or one that is within a Conservation Area, written authorisation from the Local Planning Authority is required unless removal is granted through detailed planning consent where the works have been clearly specified and agreed as necessary to implement that consent.

² <http://www.landis.org.uk>

3 Planning Policy Context

National and Local Planning Policy

- 3.1 National Planning Policy Framework (NPPF) 2023 reflects the Government's vision for a planning system that puts beautiful, environmentally sustainable, and life-enhancing places at its heart. The NPPF recognises that the natural environment is an essential component of the health and wellbeing of society, and in achieving well designed places.
- 3.2 **Paragraph 136:** trees make an important contribution to the character and quality of urban environments and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree lined, that opportunities are taken to incorporate trees elsewhere in developments, that appropriate measures are in place to secure long – term maintenance of newly planted trees, and that existing trees are retained wherever possible.
- 3.3 **Paragraph 159 a):** advises that new development should be planned for in ways that avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaption measures, including through the planning of green infrastructure.
- 3.4 **Paragraph 180 b):** Planning policies and decisions should contribute to and enhance the natural and local environment by recognizing the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic benefits of the best and most versatile agricultural land, and of trees and woodland.
- 3.5 **Paragraph 186 a) and c):** when determining planning applications, local planning authorities should apply the principles of avoidance, minimise, remediate or, as a last resort compensate for the harmful impacts of development on for example biodiversity, and irreplaceable habits (such as ancient woodland and ancient and veteran trees).
- 3.6 Growth for communities delivered by the planning system requires the careful consideration of our natural environment during the design and development process to achieve sustainable development and this report considers how the development complies with the NPPF and how it achieves sustainable development.
- 3.7 Local Planning Authorities are governed in their decision-making process by the principle of sustainable development.

- 3.8 The North Hertfordshire District Council Local Plan 2011-2031 was adopted on 8 November 2022. The following policies are relevant to the consideration of trees and development:
- 3.9 **Policy SP1: Sustainable development in North Hertfordshire** – supports the principle of sustainable development, including iv) protecting key elements of North Hertfordshire's environment including biodiversity, important landscapes, heritage assets, and green infrastructure.
- 3.10 **Policy SP9: Design and sustainability** – the council considers good design to be a key aspect of sustainable development.
- 3.11 **Policy D1: Sustainable design** – planning permission will be granted provided development proposals (iv) retain existing vegetation and proposed appropriate new planting. Section 9.7 states 'A vegetation condition survey should be undertaken to ascertain what plants within and adjoining the site, which would be affected by development, are worthy of retention and what protection measures should be put in place during construction.'
- 3.12 **Policy NE1: Strategic green infrastructure** - planning permission will be granted provided development a) protects, conserves and where possible enhances the strategic green infrastructure network, b) avoids the loss fragmentation, severance, or negative impact on the function of the strategic green infrastructure network, c) Creates new strategic green infrastructure where appropriate and is accompanied by a plan for its long-term maintenance and management d) Has suitable mitigation measures or appropriate replacement to satisfactorily address adverse impacts on the strategic green infrastructure network. Section 11.1 states protection of green infrastructure is important, however in some cases it needs to be acknowledged that appropriate mitigation measures would enable development to take place.
- 3.13 **Policy NE2: Landscape** – planning permission will be granted that a) respect the sensitivities of the relevant landscape character area, b) do not cause unacceptable harm to the character and appearance of the surrounding area or landscape character area in which the site is located, taking into account any suitable mitigation measures necessary to achieve this c) are designed and located to ensure the health and future retention of important landscape features d) have considered the long term management and maintenance of any existing and proposed landscaping.

North Herts Council Design SPD (July 2011)

- 3.14 The design document provides detailed guidance on achieving sustainable development in the district.

4 Discussion

Relevant Background

4.1 A full planning application for a new dwelling at this site was submitted to the Council in April 2023 under LPA reference 23/00830/FP. Further to the refusal of planning permission by the Council in June 2023, an appeal was lodged and subsequently dismissed on 9th April 2024 (PINs reference APP/X1925/W/23/3326023). The main issue in the appeal was the effect of the proposal on the character and appearance of the area, in relation to trees, the following key comments were made by the Inspector:

- A survey drawing or tree constraints/ protection plan has not been provided, and no clear information or assessment to demonstrate what is to be retained , whether trees or large bushes along the boundary alongside the driveway could be retained without harm during construction
- The alteration to the existing access would appear to indicate that at least one substantial tree to the west would be lost and one tree just in front of the house, not shown on the plan would appear to be lost to the new parking and turning.
- From the information presented and my findings during my visit, it would appear likely that the frontage vegetation and the side vegetation would be significantly reduced.

Key arboricultural impacts

4.2 The proposed assessment of impacts is based on the tree survey accompanying this report, which identifies all relevant trees and arboricultural features.

4.3 The following arboricultural impacts have been identified in relation to the proposed development:

Activity	Potential Impact			
	Category A	Category B	Category C	Category U
Tree Loss for Development	0	0	0	0
	All existing trees will be retained, ensuring the character and appearance of the area is maintained.			
	T33, a young weeping beech will be relocated elsewhere in the garden as it will be incompatible with the position of proposed building as it matures.			

³RPA incursion: Demolition	It will be necessary to have a pre-start meeting with the demolition contractor prior to their work commencing on site so that they understand and agree methods of tree protection and works around trees with the arboricultural consultant. Although proliferation of roots from neighbouring trees underneath the existing workshop and garage are likely to be limited, there may still be some present. Removal of foundations has the potential to cause possible root damage to neighbouring trees, it is recommended that existing substructure features are therefore retained where feasible to minimise any risk and the proposed driveway built on top.
RPA incursion: Construction	The existing road alignment will be retained at the front of the site and ensures that existing trees and shrubs either side, and along the neighbouring western boundary can be retained, avoiding any potential for root damage. Following sensitive demolition of the workshop and garage within the RPA of boundary trees T13 -T17, it is proposed that the continuation of the existing driveway will be constructed on top of existing substructures and will adopt a No-dig construction, permeable approach to avoid root damage and ensure long term sustainability of tree root function. A No-dig approach for the road servicing the proposed dwelling will be continued to ensure that potential damage to the roots of T18-T20 can be avoided. This can be installed under arboricultural site supervision to ensure the process is undertaken in accordance with the manufacturer's specifications and that it is fit for purpose. T43 will be retained, and the proposed car parking arrangement for the existing dwelling is designed to avoid visible, surface anchor roots. The car parking area will adopt a permeable No-dig construction approach to protect existing roots. To facilitate reasonable construction access to build the proposed dwelling a combination of barriers, stem protection and ground protection will be necessary. Construction access around the site for demolition and construction operations will need to be properly assessed and the tree protection requirements properly understood. It is recommended that the tree protection issues are referenced and properly acknowledged within a construction management plan. Provided the tree protection plan and method statement at Appendix B3 is used as a guide for construction operations, this should ensure that any works will not harm the retained trees.

³ RPA Section 3.7 of BS5837 (2012): layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority

RPA Incursion: Soil levels change	No soil level changes are anticipated within the root protection area of retained trees.
RPA Incursion: Underground services and drainage	No information is currently available relating to underground services or drainage for the proposal, however it should be possible to locate the utilities outside the RPA of trees. If it is essential to locate underground drainage or services runs within the RPAs of retained trees these operations should follow the recommendations in the NJUG guidelines ⁴ . In addition, it is also recommended that these works are carried out under arboricultural supervision when being installed.
RPA Incursion Landscape operations	Provided the tree protection plan is used as a guide for landscape operations, this should ensure that any works for improving the hard and soft landscaping features will not harm trees. Any landscaping works within the tree protection areas should be undertaken by hand only avoiding using machinery. Where machinery is unavoidable this should be tracked and light weight only (max of 2 tonnes). Temporary ground protection should always be installed beforehand as follows: • <i>Pedestrian</i> – single thickness scaffold boards placed on top of a compressible resistant layer of 100mm of woodchip laid onto a geotextile membrane • <i>Pedestrian operated plant</i> – gross weight of 2tonne, proprietary inter-linked ground protection boards placed on top of a compressible resistant layer of 150mm of woodchip laid onto a geotextile membrane • For wheeled or tracked construction traffic exceeding 2t gross weight, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs to an engineering specification designed in conjunction with arboricultural advice to accommodate the likely loading to which it will be subjected)
Pruning to facilitate development	Some minor pruning is required to lift the crowns of T20, T21, T22 to provide construction access around the site, and in the case of T20 to clear the roof of the proposed building. This will not involve the removal of major branches and therefore the specification complies with the British Standard for Tree Works (BS3998). T34 will be reduced to previous dimensions and on an ongoing basis.
Future growth of retained trees	This is not considered to be an issue as the layout is well designed away from trees and tree crowns and where necessary the internal room layout is designed to ensure the relationship with existing trees will be acceptable to end users.
Daylight and sunlight	Trees are an asset when it comes to the provision of shade and welcome cooling and can provide a natural alternative to the reliance on air conditioning (for

⁴ National Joint Utilities Group (NJUG) *Guidelines for the planning, installation, and maintenance of utility apparatus in proximity to trees*. Volume 4 Issue 2. London: NJUG, 2007

	example) to mitigate the effects of climate change resulting in warmer temperatures generally in the UK.
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Landscape Enhancements

- 4.4 To provide a positive landscape enhancement to the locality, the proposal includes a soft landscape proposal that provides hornbeam hedging to the front boundary and four field maple (*Acer campestre*) trees to the rear (within the redline but outside the boundaries of the proposed dwelling).

Sustainability and Compliance with planning policy

Policy	How the scheme complies
Policy SP1: Sustainable development: Policy SP9: Design and sustainability Policy D1: Sustainable design Policy NE1: Strategic green infrastructure Policy NE2: Landscape	The proposal is informed by a tree survey indicating the existing tree constraints, it addresses potential impacts complying with best practice, and allows all existing vegetation to be retained and enhanced with new landscaping. The proposal therefore achieves sustainable design and development, and the protection of the district's existing green infrastructure.

5 Conclusions

- 5.1 This report demonstrates that trees have been considered properly in accordance with best practice, impacts identified, and mitigation suggested to ensure risks from demolition and construction operations associated with the proposal can be reasonably managed and implemented where necessary.
- 5.2 A total of forty four individual trees and three groups have been assessed, of these four are poor quality and value, thirty three low quality and value, and ten of moderate quality and value. There are no trees identified as high value, or of veteran / ancient status.
- 5.3 All existing trees will be retained with the proposal, where impacts have been identified, these can be addressed by following arboricultural best practices.
- 5.4 The proposed scheme addresses the arboricultural issues outlined by the Planning Inspector on the previous dismissed appeal for the site (PINs reference APP/X1925/W/23/3326023).

Arboricultural Recommendations

- Ensure there is a pre-start meeting with the demolition and construction contractor (s) and arboricultural consultant to agree tree protection measures and methods of work
 - Arboricultural site supervision to take place during demolition of the workshop and garage and installation of the No-dig areas of road and car parking
- 5.5 Provided the approaches and further recommendations within this report are followed, the proposal can incorporate retained trees sustainably and therefore demonstrates compliance with the relevant planning policies.

Appendix A1 – Photographs



TC1 (13.05.24) View of existing driveway



TC2 (13.05.24) View looking south at the rear of the property



TC3 (13.05.24) Structural roots of T43 to be retained and protected with design



TC4 (13.05.24) View looking northwest, T43 in the foreground



TC5 (13.05.24) View looking west, existing drive alignment and boundary vegetation retained

Appendix A2 – BS 5837 Tree Data Schedule



38 Heathfield

Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes Recommendations	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Tree T1	1 Cupressus sp. (Cypress sp.)	10.0	70	1	2.2		2.1		2.0		2.0		0.0		Mature	Structural condition Fair. Physiological condition Poor. Access to inspect base - Restricted / obscured. Lower crown brown where pruned back from driveway Visually prominent but dying back throughout the crown and outgrown its location Pruned to 2.5m agl over drive	13/05/2024	221.7	8.4	0-10	U
Tree T2	1 Chamaecyparis pisifera (Sawara Cypress)	5.0	17 COM	4	1.0		1.0		1.0		1.0		0.0		Early Mature	Structural condition Good. Physiological condition Poor. Access to inspect base - Restricted / obscured. Brown patches throughout canopy Multiple stens	13/05/2024	13.3	2.1	10-20	C1
Tree T3	1 Prunus cerasifera 'Nigra' (Purple Cherry Plum)	6.0	45	1	2.0		3.0		2.8		1.5		2.0		Mature	Structural condition Good. Physiological condition Fair. Access to inspect base - Not possible. Overrun with ivy Thin crown	13/05/2024	91.6	5.4	10-20	C1/C2
Tree T4	1 Cotinus sp. (Smoke Tree)	7.0	20	1	3.7		3.0		2.2		1.5		0.5		Mature	Structural condition Good. Physiological condition Fair. Epicormic growth - Base / bole / principal stems. Leaning stem to east Western crown spread reduced Useful landscape function between boundaries but not exceptional individual	13/05/2024	18.1	2.4	10-20	C1/C2
Tree T5	1 Chamaecyparis pisifera (Sawara Cypress)	4.0	14 COM	4	1.0		1.0		1.0		1.0		0.0		Early Mature	Structural condition Good. Physiological condition Poor. Access to inspect base - Restricted / obscured. Brown patches throughout canopy Multiple stems	13/05/2024	9.8	1.8	10-20	C1
Tree T6	1 Laurocerasus officinalis (Cherry Laurel)	2.2	5 COM	2	1.8		2.0		1.7		1.0		1.0		Semi Mature	Structural condition Fair. Physiological condition Good.	13/05/2024	1.1	0.6	20-40	C1/C2

Stem **green** Estimated valueStem **AVE** Average stem diameter for tree groupsStem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

38 Heathfield

Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes Recommendations	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
Tree T7	1 Taxus baccata (Yew)	4.0	16 COM	4	1.8		2.8		2.5		1.0		1.8		Early Mature	Structural condition Fair. Physiological condition Good.	13/05/2024	11.9	1.9	20-40	C1/C2
Tree T8	1 Chamaecyparis pisifera (Sawara Cypress)	4.0	12 COM	17	0.5		0.5		0.5		0.5		0.0		Semi Mature	Structural condition Good. Physiological condition Poor. Access to inspect base - Restricted / obscured. Brown patches throughout canopy, very shaded out by trees Multiple stems	13/05/2024	6.9	1.5	0-10	U
Tree T9	1 Ilex aquifolium (Holly)	8.5	30	1	2.5		2.7		2.8		1.5		1.5		Mature	Structural condition Good. Physiological condition Good. Useful landscape function between boundaries Canopy pruned to current dimensions	13/05/2024	40.7	3.6	20-40	B1/B2
Tree T10	1 Prunus cerasifera 'Nigra' (Purple Cherry Plum)	9.0	50	1	5.7		2.6		2.8		4.5		6.0		Late Mature	Structural condition Good. Physiological condition Fair. Access to inspect base - Not possible. Ivy or climbing plant. Thin canopy Branches over site reduced Useful landscape function on boundary	13/05/2024	113.1	6.0	10-20	C1/C2
Group G11	3 Laburnum x watereri (Laburnum)	3.5	25 AVE	1	1.5		1.5		1.5		1.5		0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Off-site stems Diameter given for largest stem	13/05/2024	28.3	3.0	20-40	C2
	2 Ligustrum vulgare (Wild Privet)																				
	1 Sorbus aucuparia (Rowan/Mountain Ash)																				
	1 Taxus baccata (Yew)																				

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

38 Heathfield

Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes Recommendations	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Tree T12	1 Laburnum x watereri (Laburnum)	5.5	15 COM	3	3.5		2.4		2.0		2.0		2.0		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Decay / structural defect - Principal stems. Ivy or climbing plant. Several stems dead or dying, suppressed Useful landscape function on boundary	13/05/2024	10.3	1.8	10-20	C1/C2
Tree T13	1 Chamaecyparis pisifera (Sawara Cypress)	11.0	54 COM	4	1.3		1.7		2.3		1.1		0.7		Mature	Structural condition Fair. Physiological condition Good. Access to inspect base - Restricted / obscured. Fused stems Useful landscape function on boundary but outgrowing location	13/05/2024	136.0	6.6	10-20	C1/C2
Group G14	1 Ilex aquifolium (Holly)	8.0	25 AVE	1	2.3								1.0		Early Mature	Structural condition Fair. Physiological condition Good. Access to inspect base - Not possible. Ivy or climbing plant. Crown spread extends beyond boundary by 2.3m Stems located between 1-1.2m West of boundary, off site Useful landscape function between sites Diameter given for largest stem	13/05/2024	28.3	3.0	20-40	B2
	1 Prunus cerasifera 'Nigra' (Purple Cherry Plum)																				
Tree T15	1 Prunus cerasifera 'Nigra' (Purple Cherry Plum)	10.0	50	1	4.0		3.2		5.8		4.5		2.0		Late Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Ivy or climbing plant. Thin canopy Decaying stubs Branches over site reduced in some areas of canopy, particularly lower crown Useful landscape function on boundary	13/05/2024	113.1	6.0	10-20	C1/C2
Tree T16	1 Taxus baccata (Yew)	5.0	10	1	1.2		1.2		1.2		1.2		1.7		Semi Mature	Structural condition Good. Physiological condition Good. Access to inspect base - Not possible.	13/05/2024	4.5	1.2	40+	C1/C2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

Page 3 of 9

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38 Heathfield

Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes Recommendations	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Tree T17	1 Cupressus sp. (Cypress sp.)	13.0	30	1	3.2		3.2		3.2		3.2		4.0		Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Die-back - Throughout crown. Deadwood - Minor. Multiple codominant leaders at 4m agl Useful landscape function on boundary	13/05/2024	40.7	3.6	10-20	C1/C2
Tree T18	1 Taxus baccata (Yew)	5.0	15 COM	2	1.7		1.7		1.7		1.7		1.5		Early Mature	Structural condition Good. Physiological condition Good. Access to inspect base - Not possible. Useful landscape function on boundary	13/05/2024	11.0	1.9	40+	C1/C2
Tree T19	1 Cupressus sp. (Cypress sp.)	10.0	22 COM	4	3.0		3.0		3.0		3.0		4.5		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Multiple stems Useful landscape function on boundary	13/05/2024	21.9	2.6	10-20	C1/C2
Tree T20	1 Fagus sylvatica (Common Beech)	16.0	70	1	6.8		6.8		6.8		6.8				Mature	Structural condition Fair. Physiological condition Good. Access to inspect base - Not possible. Ivy or climbing plant. Copper beech Two leaders, tight fork at 1m agl Crown height over site between 1.5m at lowest and 4.8m at highest, small diameter branches	13/05/2024	221.7	8.4	20-40	B2
Tree T21	1 Taxus baccata (Yew)	8.0	38	1	3.0		2.8		4.6		4.0		1.5		Mature	Structural condition Good. Physiological condition Good. Access to inspect base - Not possible. Useful landscape function on boundary	13/05/2024	65.3	4.6	20-40	B2
Tree T22	1 Sorbus aucuparia (Rowan/Mountain Ash)	10.0	20	1	4.0		3.8		4.0		3.5		1.5		Mature	Structural condition Poor. Physiological condition Good. Access to inspect base - Not possible. Useful landscape function on boundary Weak fork in main stem, wound on lower stem	13/05/2024	18.1	2.4	10-20	C1/C2
Tree T23	1 Sorbus aucuparia (Rowan/Mountain Ash)	8.0	15	1	2.0		2.0		2.0		2.5		1.5		Early Mature	Structural condition Poor. Physiological condition Fair. Access to inspect base - Not possible. Useful landscape function on boundary Suporessed Decayed pruning wounds in upper stem	13/05/2024	10.2	1.8	20-40	C1/C2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

Page 4 of 9

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes Recommendations	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Tree T24	1 Laburnum x watereri (Laburnum)	6.0	14	1	1.0		2.0		1.0		1.0		2.0		Early Mature	Structural condition Fair. Physiological condition Poor. Access to inspect base - Not possible. Die-back - Upper crown. Deadwood - Minor. Epicormic growth - Bole / principal stems.	13/05/2024	8.9	1.7	10-20	C1
Tree T25	1 Prunus cerasifera 'Nigra' (Purple Cherry Plum)	9.0	43 COM	2	6.0		2.5		2.5		3.0		3.5		Mature	Structural condition Fair. Physiological condition Good. Access to inspect base - Not possible. Slight growth lean north Thin upper canopy	13/05/2024	83.7	5.2	10-20	C1/C2
Tree T26	1 Cupressocyparis leylandii (Leyland Cypress)	14.0	40	1	5.0		4.0		5.0		4.0		2.5		Mature	Structural condition Good. Physiological condition Fair. Access to inspect base - Not possible. Prominent feature on boundary but not a good example of species	13/05/2024	72.4	4.8	20-40	B2
Group G27	1 Laurocerasus officinalis (Cherry Laurel)	4.0	8 AVE	3	1.9								0.0		Semi Mature	Structural condition Fair. Physiological condition Good.	13/05/2024	8.7	1.7	20-40	C2
	1 Laurus nobilis (Bay/Bay Laurel/Poets Laurel)																				
	1 Taxus baccata (Yew)																				
	1 Viburnum sp. (Viburnum sp.)																				
Tree T28	1 Chamaecyparis pisifera (Sawara Cypress)	7.0	21 COM	5	1.5		1.5		1.5		1.5		0.0		Early Mature	Structural condition Fair. Physiological condition Good. Access to inspect base - Not possible. Useful landscape function on boundary	13/05/2024	20.7	2.6	20-40	C1/C2
Tree T29	1 Taxus baccata (Yew)	7.0	15 COM	7	2.3		2.3		2.3		1.0		0.0		Early Mature	Structural condition Fair. Physiological condition Good. Useful landscape function on boundary	13/05/2024	11.4	1.9	20-40	C1/C2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Page 5 of 9

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes Recommendations	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
Tree T30	1 Prunus cerasifera (Cherry Plum (Myrobalan))	5.0	20	1	2.0		0.5		2.0		2.0		0.5		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Suppressed by more dominant tree to east	13/05/2024	18.1	2.4	10-20	C1
Tree T31	1 Prunus cerasifera (Cherry Plum (Myrobalan))	7.0	40	1	4.0		1.5		3.6		3.8		1.5		Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Ivy or climbing plant. Useful landscape function on boundary Over run with ivy Thin upper canopy	13/05/2024	72.4	4.8	10-20	C1/C2
Tree T32	1 Prunus cerasifera (Cherry Plum (Myrobalan))	7.0	12	1	1.0		2.2		2.2		2.2		1.5		Semi Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Crown reduced over site in lower crown, poor crown form and general structure	13/05/2024	6.5	1.4	10-20	C1/C2
Tree T33	1 Fagus sylvatica (Common Beech)	1.2	8	1	0.8		0.8		0.8		0.8		0.0		Young	Structural condition Good. Physiological condition Good. Weeping copper beech	13/05/2024	2.9	1.0	40+	C1
Tree T34	1 Ilex sp. (Holly sp.)	8.5	29 COM	2	2.4		2.5		2.7		3.0		1.6		Mature	Structural condition Poor. Physiological condition Good. Golden king variety Weak fork at 0.5m agl Has been crown reduced / topped in past at approximately 6.5m agl and regrown Useful landscape function on boundary but not high quality	13/05/2024	38.0	3.5	10-20	C1/C2
Tree T35	1 Taxus baccata (Yew)	4.0	11	1	2.0		2.5		3.0		2.4		1.5		Semi Mature	Structural condition Fair. Physiological condition Good. Access to inspect base - Not possible. Growing under a dead laburnum tree	13/05/2024	5.5	1.3	40+	C1/C2
Tree T36	1 Cupressus sp. (Cypress sp.)	9.0	31	1	2.0		2.0		2.0		2.0		2.5		Mature	Structural condition Good. Physiological condition Poor. Die-back - Throughout crown. In decline	13/05/2024	43.5	3.7	0-10	U
Tree T37	1 Cupressus sp. (Cypress sp.)	9.0	37	1	2.3		3.0		2.2		2.1		0.5		Early Mature	Structural condition Good. Physiological condition Good. Useful landscape function on boundary	13/05/2024	61.9	4.4	20-40	B1/B2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Page 6 of 9

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes Recommendations	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Tree T38	1 Chamaecyparis pisifera (Sawara Cypress)	7.0	31 COM	8	3.0		3.0		3.0		3.0		0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Restricted / obscured. Multiple stems, browning foliage at base to north Useful landscape function on boundary	13/05/2024	43.8	3.7	10-20	C1/C2
Tree T39	1 Picea abies (Norway Spruce)	16.0	60	1	3.8		4.0		4.0		3.2		2.0		Mature	Structural condition Good. Physiological condition Good. Access to inspect base - Not possible. Ivy or climbing plant.	13/05/2024	162.9	7.2	20-40	B1/B2
Tree T40	1 Taxus baccata (Yew)	10.0	40	1	4.3		4.0		4.0		4.0		2.0		Mature	Structural condition Good. Physiological condition Good. Access to inspect base - Not possible. Epicormic growth around stem managed as hedge Crown pruned back from corner of house	13/05/2024	72.4	4.8	20-40	B1/B2
Tree T41	1 Chamaecyparis pisifera (Sawara Cypress)	2.0	10	1	0.5		0.5		0.5		0.5		0.0		Semi Mature	Structural condition Fair. Physiological condition Good. Access to inspect base - Not possible.	13/05/2024	4.5	1.2	20-40	C1
Tree T42	1 Chamaecyparis pisifera (Sawara Cypress)	2.0	10	1	0.5		0.5		0.5		0.5		0.0		Semi Mature	Structural condition Fair. Physiological condition Good. Access to inspect base - Not possible.	13/05/2024	4.5	1.2	20-40	C1
Tree T43	1 Prunus sp. (Cherry sp.)	7.0	40	1	4.0		3.8		3.5		3.7		3.0		Mature	Structural condition Fair. Physiological condition Fair. Topped at 5-6m agl previously and regrown, managed with reduced crown Recent crown lifting work Thin canopy Fork with swelling at 1.5m, two main leaders Large surface roots running along edge of drive Stem exudations and target canker on western leader at 3m agl	13/05/2024	72.4	4.8	10-20	C1
Tree T44	1 Pinus nigra (Black Pine)	22.0	80	1	6.0		9.2		9.5		8.0		8.5		Mature	Structural condition Good. Physiological condition Fair. Access to inspect base - Not possible. Deadwood - Minor. Slightly unbalanced crown Some needle death throughout crown Significant landscape feature, very prominent	13/05/2024	289.5	9.6	20-40	B1/B2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Page 7 of 9

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes Recommendations	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Tree T45	1 Fraxinus excelsior (Ash)	6.0	37	1	1.3		2.2		3.2		1.7		2.2		Mature	Structural condition Fair. Physiological condition Poor. Pollarded regularly and historically Just coming into leaf Ash dieback symptoms evident on young shoots Fungal fruiting body Daldinia concentrica on main stem and structural branches abd insect boring on main stem	13/05/2024	61.9	4.4	0-10	U
Tree T46	1 Tilia x vulgaris (Common Lime)	7.0	45	1	3.3		3.0		3.0		2.0		1.0		Mature	Structural condition Fair. Physiological condition Good. Polarded, managed Adds generally to landscape character, prominent location	13/05/2024	91.6	5.4	20-40	B2
Tree T47	1 Cupressus sp. (Cypress sp.)	12.0	70	1	2.7		3.0		2.0		2.4		0.0		Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Restricted / obscured. Lower crown brown where pruned back from driveway Visually prominent but outgrown its location Pruned to 2.5m agl over drive	13/05/2024	221.7	8.4	10-20	C1/C2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Page 8 of 9

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Table 1 of BS5837 (2012)

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 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			RED
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Tree 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
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.	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 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.	GREY

Appendix A3 – Tree Work Schedule

Tree Work Schedule

Site: 38 Heathfield

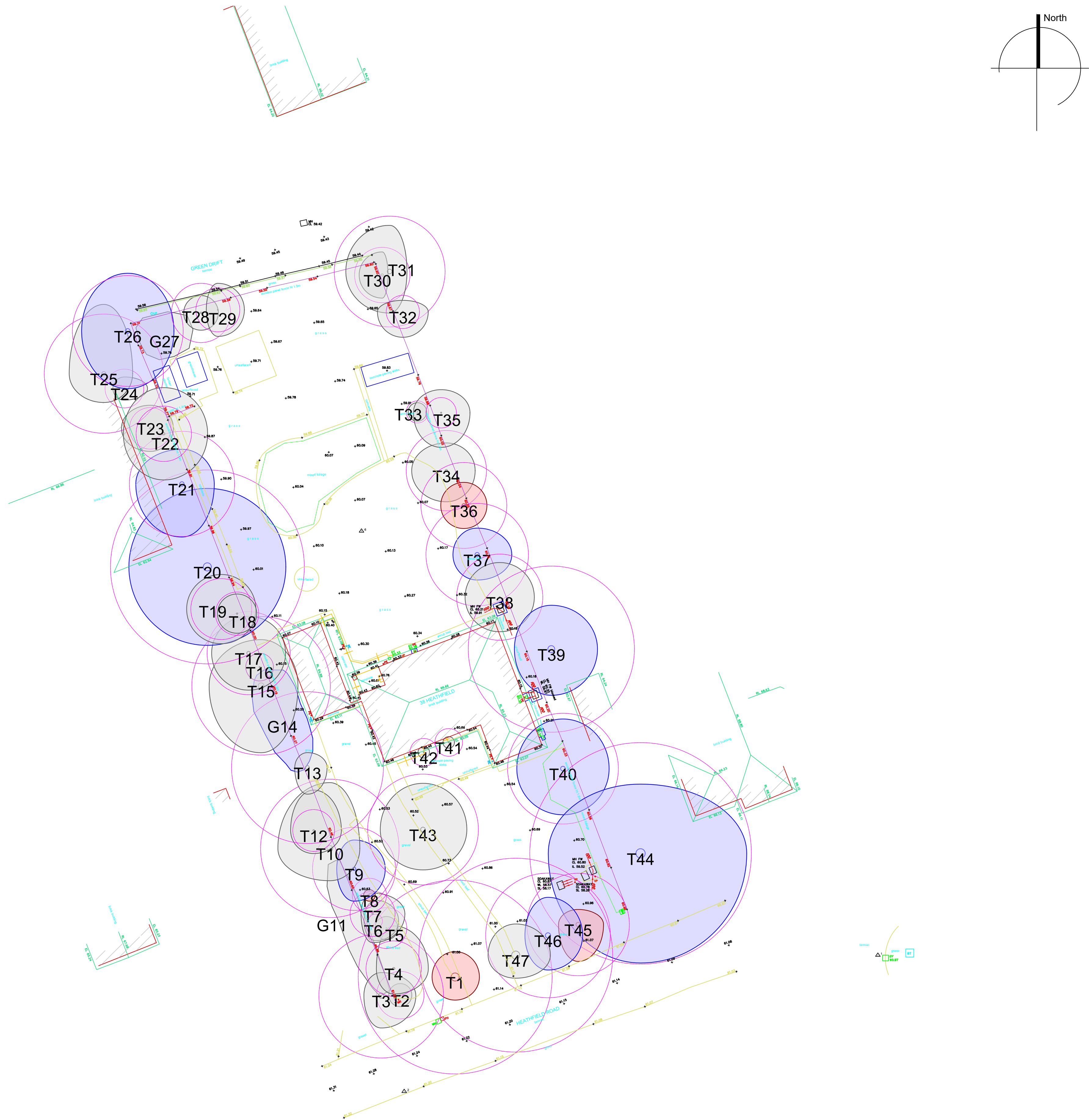
Date: May 2024

Tree / Group No.	Species	BS Category	Life Stage	Recommended works
Proposed Pruning				
T20	Copper beech	B2	Mature	Lift minor pendulous growth to give 4m clearance over site for construction access and reduce eastern crown extents by up to 1m
T21	Yew	B2	Mature	Crown lift over site by 1.5m to give 3m clearance for construction access
T22	Rowan	C1/C2	Mature	Crown lift over site by 1.5m to give 3m clearance for construction access
T33	Weeping beech	C1	Young	Relocate within the garden
T34	Holly	C1/C2	Mature	Reduce to previous pruning points and lift crown to give 3m clearance above ground level for construction access and maintain on this basis
T35	Yew	C1/C2	Semi mature	Reduce western crown spread back to site boundary to provide construction access and maintain on this basis

NOTE:

All tree works should comply with BS 3998 (2010) - Recommendations. If necessary, appropriate checks by a suitably qualified ecologist should be made before tree works are undertaken, and all works should only be carried out once planning permission has been granted and any pre-commencement planning conditions relating to tree work have been discharged. Where feasible and there is no risk of spreading diseases or pathogens, consider re-using timber from felled trees on site for creation of ecological habitat piles, furniture or woodchips for landscaping works, this re-use will help to maintain / lock carbon storage achieved from the growing trees.

Appendix B1 – Tree Survey Plan



BS5837:2012 Tree Categorisation

- A Category**
Trees of high quality with an estimated remaining life expectancy of at least 40 years
- B Category**
Trees of moderate quality with an estimated life expectancy of at least 20 years
- C Category**
Trees of low quality with an estimated life expectancy of at least 10 years, or young trees with a stem diameter below 150mm
- U Category**
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

Key

- Root Protection Area (RPA)**
The minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability. Where the tree is ancient the RPA follows Natural England Standing Advice 2022.

Do not scale from this drawing, tree positions and dimensions should always be checked on site. The original of this drawing is in colour, do not rely on monochrome versions. This drawing is copyright Tracy Clarke Tree Consultancy Ltd. ©

0 5m 10m 15m 20m		
Date	Revision	Description

Title
Tree Survey

Client
1418 Development & Consulting LTD

Site
38 Heathfield, Royston, SG8 5BN

Ref: TCTC-19171-PL-01	Rev: -	Scale: 1:200 @ A1
Status: Planning	Date: 13-05-2024	Drawn By: AC

TRACY CLARKE
TREE CONSULTANCY

01371 811831 info@tracyclarke.co.uk www.tracyclarke.co.uk

Appendix B2 – Proposal Plan



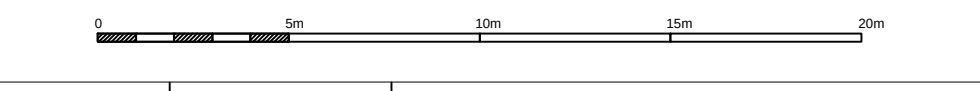
BS5837:2012 Tree Categorisation

- A Category**
Trees of high quality with an estimated remaining life expectancy of at least 40 years
- B Category**
Trees of moderate quality with an estimated life expectancy of at least 20 years
- C Category**
Trees of low quality with an estimated life expectancy of at least 10 years, or young trees with a stem diameter below 150mm
- U Category**
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

Key

- Root Protection Area (RPA)**
The minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability. Where the tree is ancient the RPA follows Natural England Standing Advice 2022.
- Trees to be relocated

Do not scale from this drawing, tree positions and dimensions should always be checked on site. The original of this drawing is in colour, do not rely on monochrome versions. This drawing is copyright Tracy Clarke Tree Consultancy Ltd. ©



24.05.24	B	Revised layout 24.05.24
20.05.24	A	Revised layout 20.05.24
Date	Revision	Description

Title
Proposed Layout

Client
1418 Development & Consulting LTD

Site
38 Heathfield, Royston, SG8 5BN

Ref: TCTC-19171-PL-02	Rev: B	Scale: 1:200 @ A1
Status: Planning	Date: May 2024	Drawn By: AC


TRACY CLARKE
TREE CONSULTANCY

 01371 811831  info@tracyclarke.co.uk  www.tracyclarke.co.uk

Appendix B3 – Tree Protection Plan and Heads of Terms Method Statement

ARBORICULTURAL METHOD STATEMENT (HEADS OF TERMS)

Tree works

All tree works recommended with the proposal will be carried out in accordance with BS 3998:2010 *Tree work - Recommendations* prior to any construction machinery arriving on site. Once completed, installation of protective barriers and temporary ground protection will take place immediately.

Protective Barriers

Protective barriers will be installed in the locations specified on this drawing prior to any works starting on site. There are two types of fencing specified; the default fencing which is required for areas of highest demolition and construction intensity and risk to trees, and the above ground stabilising system for less intensively used areas of the site.

Temporary Ground Protection

Where specified, temporary ground protection will be installed in accordance with this drawing. The intention is to protect roots and soil from potential compaction damage where the installation of a barrier would be impractical for demolition and construction activities. The specification will be suitable to withstand the vehicle or pedestrian loads to be used in these areas as follows:

Pedestrian use only:

Ground protection to consist of single thickness scaffold boards placed on top of a compressible resistant layer of 100mm of woodchip laid onto a geotextile membrane.

Pedestrian operated plant - Machinery gross weight limited to 2 tonne.

Ground protection to consist of proprietary interlinked ground protection boards placed on top of a compressible resistant layer of 150mm of woodchip laid onto a geotextile membrane.

Wheeled or tracked construction traffic exceeding 2 tonne gross weight

Ground protection to consist of proprietary linked mat systems or pre-cast reinforced concrete slabs to an engineering specification designed in conjunction with arboricultural advice to accommodate the likely load to which it will be subjected to.

Contractor Set Up and Working Space and Operational Methods

Before works start on site, if not already available, the contractor responsible for all demolition and construction operations will provide a Construction Environmental Plan (CEMP) or similar which indicates the proposed site compound, welfare facilities, traffic routes, and storage of materials for review and agreement by the appointed arboricultural consultant. The CEMP will be amended as required and incorporated into the site tree protection plans by the appointed arboricultural consultant and re-circulated for site use.

Method Statement for Post Holes Excavations

All excavations for postholes within RPAs or CEZs will be carried out manually using appropriate hand tools or using an air spade to remove soil and expose tree roots, outer bark of roots must remain intact.

Prior to starting, the location of the proposed holes will be marked out on site for clarification and to prevent unnecessary overspill of site activities beyond the expected operational area.

No posts will be driven into the ground where they are within 2.5m of the stem of a mature tree, posts will be repositioned and alternative methods for supporting the panel in these locations will be agreed with the arboricultural consultant.

During hand excavation works for post holes all roots greater than 25mm in diameter and where feasible clumps of fibrous roots will be retained and wrapped in Hessian during the works to prevent desiccation, this will be kept damp for the duration.

Roots encountered less than 25mm in diameter will be pruned where necessary to complete works, all appropriate legal consents must be in place to do this beforehand.

Root pruning will only be carried out using sharp, sterile tools suitable to the size of the root to be cut.

Where concrete is to be used the excavated holes will be sleeved using a 2-3mm PVC sheeting or bags to prevent concrete leaching into the soil.

Prior to backfilling the holes, any Hessian wrapping around roots will be removed, the roots will then be covered using the excavated soil, back to existing ground levels.

Specialist Foundation Construction

Foundations within the root protection area of trees will be constructed only using special engineering solutions which will avoid significant root pruning, methods such as piles and suspended ground beams or slabs will be used, appropriate design for the site conditions will be specified by an engineer in liaison with an arboriculturist. Any excavations in existing built footprints will not exceed the existing building footprint or depth of existing footings.

No-Dig Construction

Where no-dig construction is specified on this drawing the method of construction and installation will retain existing ground levels, any existing vegetation sprayed and hollows filled with sharp sand to create a level finish. The use of a load bearing three dimensional system with a permeable surface, and low impact kerb edging will be used to avoid soil compaction and potential damage to tree roots and stems. Appropriate tree root protection systems are available from www.geosyn.co.uk, or www.terram.com and this should be installed only by the manufacturer to ensure it is effective. Reference should be made to BS5837(2012) section 7.4 and Arboricultural Guidance Note 12 'Use of Cellular Confinement Systems Near Trees' (www.trees.org.uk)

Underground drainage and services

Drainage and services installation will avoid the root protection area of trees, where this is unavoidable the approach to install will follow NJUG (2007 Volume 4, Issue 2). All manholes must avoid root protection areas entirely.

Excavations and Root Pruning

All excavations within root protection areas will be carried out under arboricultural site supervision. Prior to commencement, the extent of excavations will be marked out by the contractor with spray paint. No excavations will extend beyond these defined areas or the specified depths and the site contractor will be responsible for ensuring all ground workers are made aware of these limits. Exposed roots will be pruned making a clean cut with a sterilised handsaw, or secateurs to clear roots to the construction depth required. Where small diameter roots occur in clumps these will be retained and moved out of the way of construction where practical. All exposed pruned roots will be immediately wrapped in wet hessian to prevent desiccation and to protect against extreme temperature fluctuations. On completion of the excavations works the hessian will be removed and all pruned roots covered with good quality top soil. No machinery will be permitted within the RPA of the trees during these works.

General Tree Protection Measures

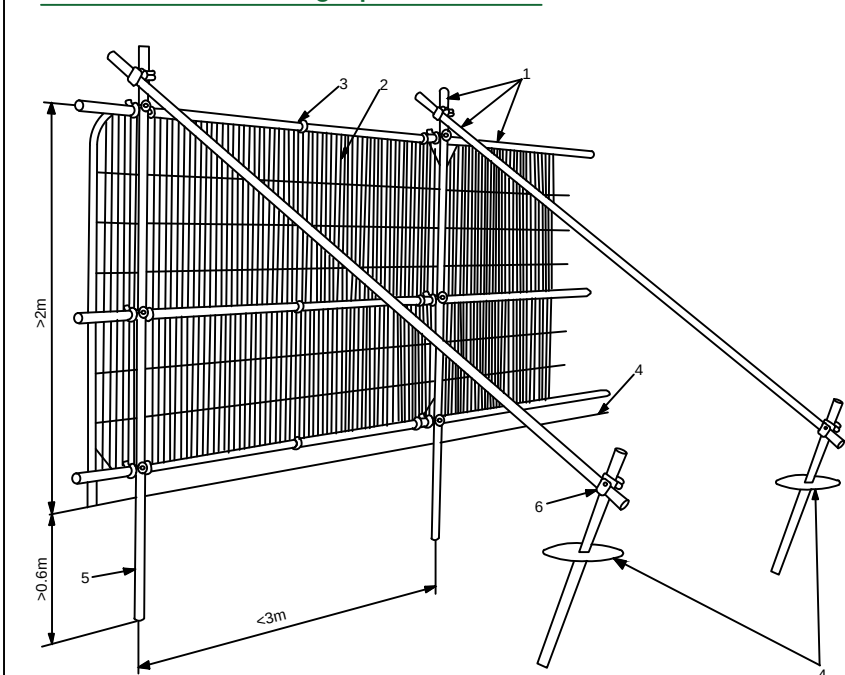
- No construction or demolition works will take place within any protection zone identified on this drawing. Barriers and ground protection will remain intact and in position until works on site are completed, no alterations will take place without consulting the project arboriculturist beforehand
- No chemicals will be used within 3m of a tree, including hazardous material, cement or other toxic materials

Supervision of Works

Once protection measures as specified on this drawing are in place, the project arboriculturist will be notified and a site visit will take place to approve the installations are fit for purpose. Site operations can commence once this has been approved.

Ongoing site visits by the project arboriculturist will take place at intervals to ensure that tree protection measures are adhered to for the duration of the project works on site.

Protective Fencing Specification



- Key
- Standard scaffold poles.
 - Heavy gauge 2m tall galvanized tube and welded mesh infill panels.
 - Panels secured to upright and cross-members with wire ties.
 - Ground level.
 - Uprights driven into the ground until secure (minimum depth 0.6m).
 - Standard scaffold clamps.

Tree Stem Protection for T34 and T36



Specification for No-Dig Areas of Construction

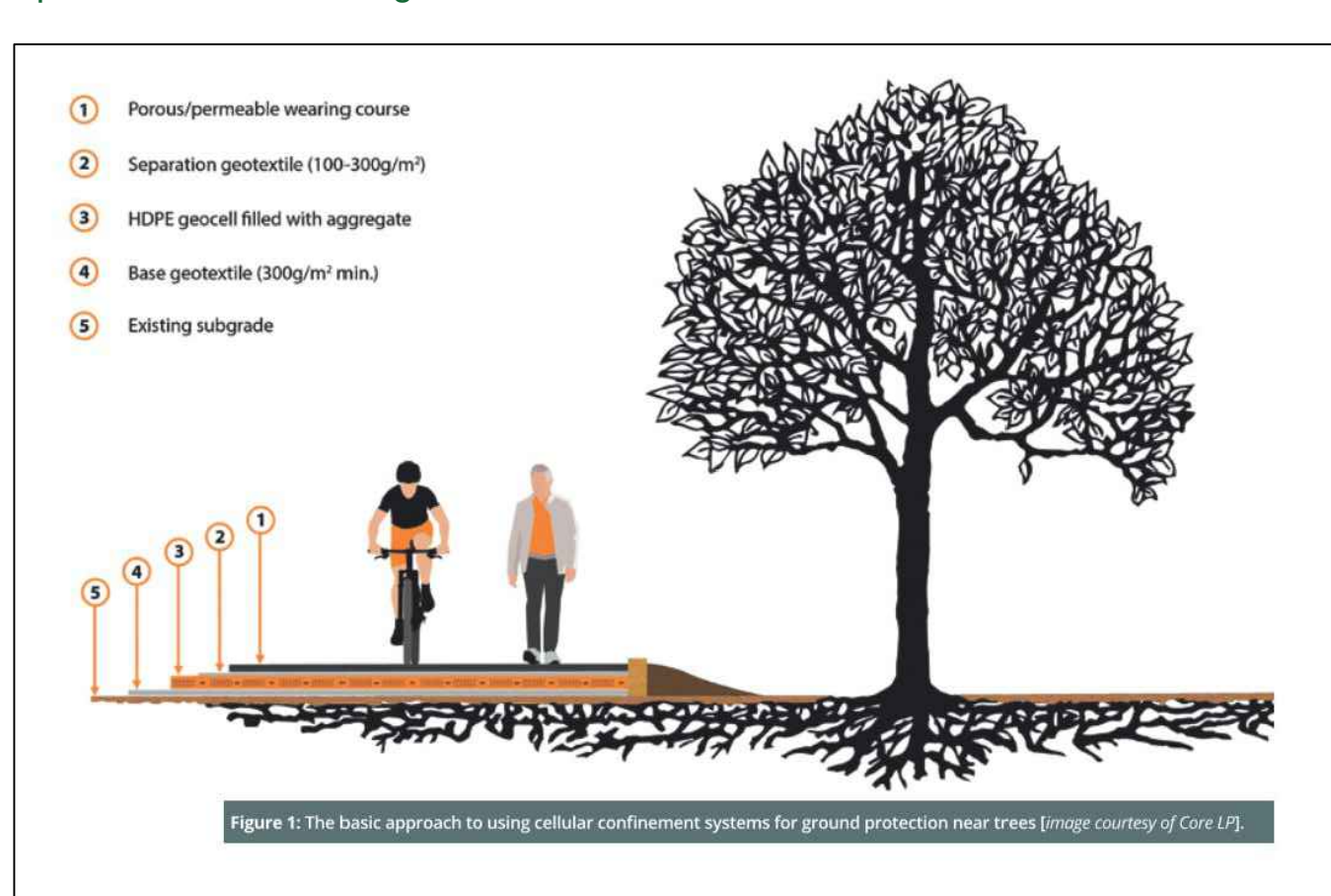
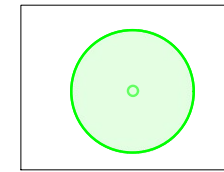
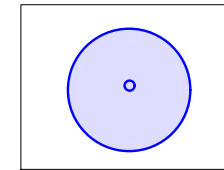


Figure 1: The basic approach to using cellular confinement systems for ground protection near trees [image courtesy of Core LP]

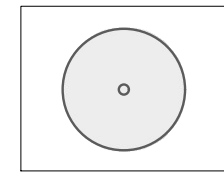
BS5837:2012 Tree Categorisation



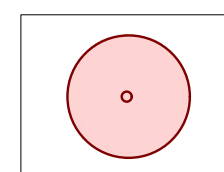
A Category
Trees of high quality with an estimated remaining life expectancy of at least 40 years



B Category
Trees of moderate quality with an estimated life expectancy of at least 20 years

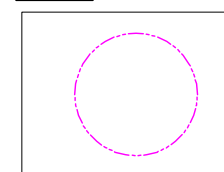


C Category
Trees of low quality with an estimated life expectancy of at least 10 years, or young trees with a stem diameter below 150mm

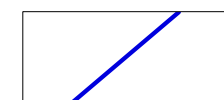


U Category
Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years

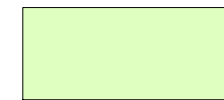
Key



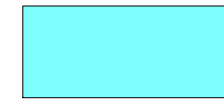
Root Protection Area (RPA)
The minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability. Works within this area must be avoided in the first instance or be made subject of an agreed method with the arboricultural consultant.



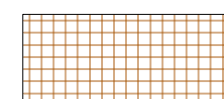
BS 5837 2012 Default weldmesh specification for protective barrier



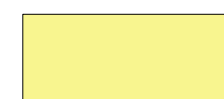
Construction exclusion zone, no entry by personnel or machinery permitted and no storage of materials



No-dig construction permeable hard surface to be installed by manufacturer an installed under direct arboricultural site supervision

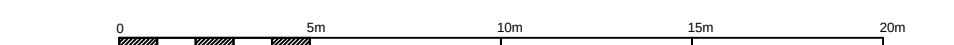


Temporary ground protection to be installed in accordance with best practice to avoid soil compaction. Refer to the arboricultural consultant for further advice



Existing driveway and sub base of existing buildings retained in situ during works on site to protect roots of existing trees.

Do not scale from this drawing, tree positions and dimensions should always be checked on site. The original of this drawing is in colour, do not rely on monochrome versions. This drawing is copyright Tracy Clarke Tree Consultancy Ltd. ©



Date	Revision	Description

Title
Tree Protection Plan and Method Statement

Client
1418 Development & Consulting LTD

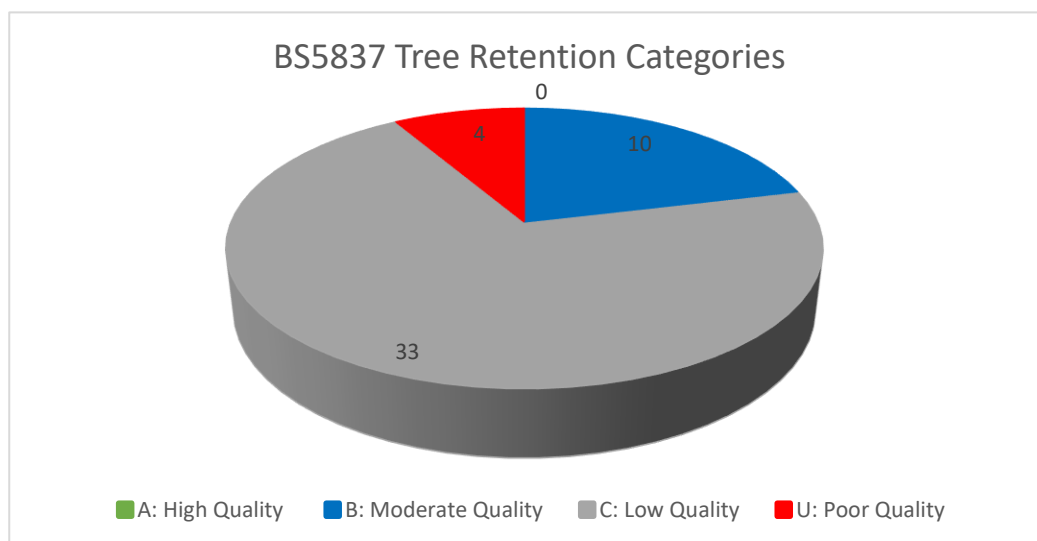
Site
38 Heathfield, Royston, SG8 5BN

Ref: TCTC-19171-PL-03	Rev: -	Scale: 1:200 @ A1
Status: Planning	Date: May 2024	Drawn By: TC

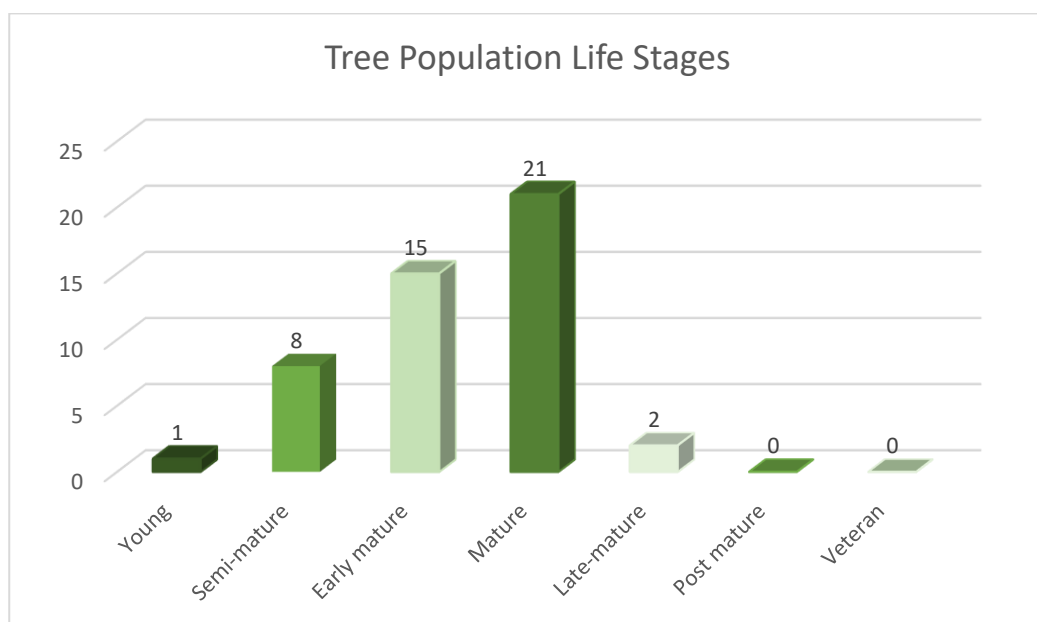


Appendix C – Tree Data Analysis

BS5837 (2012) quality and value of the tree population



Age Diversity



Appendix D – Qualifications

I am a Registered Chartered arboriculturist with the Institute of Chartered Foresters, a Fellow of the Arboricultural Association, a Chartered Environmentalist, and I have a Postgraduate Diploma in arboriculture and community forest management from Middlesex University, and a Higher National Diploma in arboriculture and I have over twenty five years' experience in the field of arboriculture.

Tracy Clarke MICFor. F.Arbor.A. CEnv



Excellence in Arboriculture



info@tracyclarke.co.uk



www.tracyclarke.co.uk



01371 811831



Head Office:

5 High Street

Great Bardfield

Essex

CM7 4RF



TRACY CLARKE
TREE CONSULTANCY