

# BS: 5837 ARBORICULTURAL IMPLICATIONS ASSESSMENT TREE PROTECTION PLAN & METHOD STATEMENT

Our Ref: GD/190110R2-R3/sh

Date: 11th December 2019

**CLIENT:** Guild Living Ltd

One Coleman Street

London EC2 5AA

**SITE ADDRESS:** Epsom Hospital

**Dorking Road** 

Epsom Surrey KT18 7EG

**DATE OF VISIT:** 31st May 2019 & 4th December 2019

**PEOPLE PRESENT:** Mr G Davies (Bartlett Consulting)

**REPORT COMPLETED BY:** Mr G Davies FdSc Arb

# **Summary:**

The following report is a preliminary Arboricultural Implications Assessment (AIA), derived from the BS: 5837 Tree Survey, Report and Tree Constraints Plan, Reference: GD/190110/R/sh, dated 5<sup>th</sup> June 2019

The report identifies where the proposed development has the potential to result in the loss of, or damage to, trees indicated for retention due to site operations taking place within, or in close proximity to, the trees crown and/or calculated tree root protection areas.

Included is a Tree Protection Plan and Arboricultural Method Statement identifying the precise location of physical tree protection as well as providing the appropriate specification. This Method Statement includes recommended planning and working methodologies for associated demolition and construction operations from an arboricultural perspective.

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### 1.0 SCOPE OF REPORT

#### 1.1 Instruction

Bartlett Consulting has previously been instructed to undertake a tree survey and compose a Tree Constraints Plan (TCP) in accordance with British Standard 5837: 2012 *Trees in Relation to Design, Demolition and Construction – Recommendations*, gathering data on all trees and vegetation within the boundary of Epsom Hospital, Dorking Road, Epsom, Surrey, as well as those on neighbouring properties considered to be within influencing distance.

This report takes the previously gathered tree data and constraints, and overlays that information with the proposed site plan and proposed site layout, allowing for an evaluation of how the proposed development will co-exist with the tree population. Where there are tree which have the potential to influence, those trees must be considered as a constraint within the project planning.

# 1.2 Documents & Supporting Information

Bartlett Consulting was provided with the following documentation and plans. They were sent via email in both PDF and DWG file format:

- Site Plan Plot 2A Dwg No: -04 Project No: 18385 Dated: Septemer 2018
- Level 0 Ground Floor Dwg No: A2 01 Rev M Dated 22<sup>nd</sup> November 2019
- Site Sections 'DRAFT' Dwg: A4.01 to 04 Rev A Dated 22<sup>nd</sup> November 2019
- Prliminary Ecological Appraisal Job No: 270352-00 Dated 15 November 2019
- Level 0 Ground Floor Job No: 18120 Dwg No: A2.01 Dated 22 November 2019

# 1.3 Aspects Included within Report

The information contained within this report is fully compliant with British Standard 5837 2012: *Trees in Relation to Design, Demolition and Construction – Recommendations*.

This Arboricultural Impact Assessment (AIA) & Method Statement is accompanied by a Tree Protection Plan (TPP). This plan illustrates trees to be retained and incorporated into the proposed development, identifies where above and below ground level constraints are caused and gives consideration to statutory controls, as well as the potential loss of trees on and adjacent to the site. Issues also considered identify any necessity to undertake facilitation pruning to retained trees, either arising from accommodation, excessive shading or due to an unacceptable amount of encroachment upon a retained trees rooting zone.

The TPP also identifies recommended locations of physical tree protection barriers, non-compacting ground protection, and site specific working methodologies.

Mitigation measures are also provided within this report, identifying the need for physical tree protection barriers, non-compacting ground protection, as well as tree replacement planting.

Modified RPA's will be illustrated if known below ground level obstructions exist, or where considered appropriate to do so, whilst tree shade patterns and future canopy spread for young trees will also be illustrated where necessary.

The contents of this report do not include discussions regarding subsidence and/or heave as a result of retention or tree removal, nor does this report consider the water demands of trees present to determine foundation design and depth. If required, this can be provided on request.



# 1.0 SCOPE OF REPORT (Continued...)

# 1.4 Assessment of Ecological Status of Site & Potential Constraints

Following a Preliminary Ecology Appraisal carried out by Ove Arup & Partners Ref: 270352-00, there are a number of trees on site that have potential for wildlife and ecological associations.

The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act 2000, provides statutory protection to birds, bats, insects and other species that inhabit trees, hedgerows, or other associated vegetation. Ecological considerations that involve EU Habitats Directive will over rule any arboricultural recommendations as given within this report.

All trees must be thoroughly and properly assessed for nesting birds prior to the commencement of any recommended tree works.



# 2.0 IMPLICATIONS OF PROPOSED DEVELOPMENT UPON THE EXISTING TREE POPULATION

# 2.1 Description of the Proposed Development

From the information provided to us and listed in Section 1.2 above, it is our understanding that the following aspects of proposed development which influence, or are influenced by the existing trees are:

- 1. Demolition of the existing buildings and infrastructure
- 2. Removal of hardstanding surfaces
- 3. Excavations for foundations and Construction of buildings
- 4. Hard & soft landscaping throughout

# 2.2 Table 1: Implications of the Proposed Development upon the Existing Tree Population

Tree	Constan	gory	Remova	al due to	Mitigation Required			
Ref.	Species	Category	Works	Condition	Crown	RPA	Aspect of Development affecting retained tree	
T1	Common Elder Sambucas nigra	C1	✓	N/A	N/A	N/A	Removal required to facilitate proposed landscaping scheme	
T2	Common Yew Taxus baccata	C1	<b>✓</b>	N/A	N/A	N/A	Removal required to facilitate proposed landscaping scheme	
G3	Mixed Group	U	N/A	✓	N/A	N/A	Impractical level of mitigation required for the retention of low quality tree	
T4	Lawson Cypress Chamaecyparis lawsoniana	U	N/A	✓	N/A	N/A	• Dead	
T5	Common Holly Ilex aquifolium	U	N/A	✓	N/A	N/A	Impractical level of mitigation required for the retention of low quality tree	
Т6	Common Laburnum <i>Laburnum</i> anagyroides	C1	✓	N/A	N/A	N/A	Removal required to facilitate proposed landscaping scheme	
Т7	Silver Birch Betula pendula	B1	N/A	N/A	N/A	✓	<ul> <li>Proposed permeable hardstanding car parking surface within 31% of RPA</li> <li>Removal of impermeable existing hardstanding within RPA</li> </ul>	
G8	Group of Lawson Cypress Chamaecyparis Iawsoniana	C2	N/A	N/A	<b>&gt;</b>	<b>&gt;</b>	<ul> <li>North eastern crown spread partially overhanging site and proposed access road</li> <li>Removal of existing impermeable hardstanding and installation of permeable within approx. 20% RPA</li> </ul>	
G9	Group of 3 Sycamore Acer pseudoplatanus	B2	<b>√</b>	N/A	N/A	<b>√</b>	<ul> <li>Partial removal of eastern most specimen</li> <li>Removal of impermeable hardstanding within RPA</li> <li>Installation of hardstanding within 20% RPA</li> </ul>	
T10	Group of 11 Common Yew Taxus baccata	C2	✓	N/A	N/A	N/A	Removal required to facilitate proposed development	



Tree		Jory	Remov	al due to	Mitigation Required			
Ref.	Species	Category	Works	Condition	Crown	RPA	Aspect of Development affecting retained tree	
T11	Common Ash Fraxinus excelsior	C1	✓	N/A	N/A	N/A	Removal required to facilitate proposed development	
T12	Sycamore Acer pseudoplatanus	C1	<b>\</b>	N/A	N/A	N/A	Removal required to facilitate proposed development	
T13	Lawson Cypress Chamaecyparis lawsoniana	U	N/A	<b>✓</b>	N/A	N/A	Impractical level of mitigation required for the retention of low quality tree	
G14	Group of 11 Field Maple Acer campestre	B2	N/A	N/A	<b>√</b>	N/A	North western crowns partially overhanging proposed footpath	
T15	Sycamore Acer pseudoplatanus	A1	N/A	N/A	N/A	✓	<ul> <li>Removal of impermeable existing hardstanding within RPA</li> <li>Proposed installation of permeable hardstanding within less than 6% of RPA</li> </ul>	
T16	Holm Oak Quercus ilex	C1	N/A	N/A	N/A	N/A	• None	
T17	Common Ash Fraxinus excelsior	U	N/A	<b>√</b>	N/A	N/A	• Dead	
T18	Apple Malus domestica	C1	N/A	N/A	N/A	N/A	• None	
T19	Mountain Ash Sorbus aucuparia	C1	N/A	N/A	N/A	N/A	• None	
T20	Holm Oak Quercus ilex	C1	N/A	N/A	<b>√</b>	N/A	Eastern crown overhanging proposed footpath	
T21	Common Ash Fraxinus excelsior	U	N/A	<b>✓</b>	N/A	N/A	• Dead	
T22	Bird Cherry Prunus padus	U	N/A	✓	N/A	N/A	• Dead	
T23	Common Horse Chestnut Aesculus hippocastanum	B1	N/A	N/A	N/A	<b>√</b>	<ul> <li>Removal of impermeable existing hardstanding within RPA</li> <li>Proposed installation of permeable hardstanding within less than 3% of RPA</li> </ul>	
G24	Group of 2 Common Ash Fraxinus excelsior	C2	N/A	N/A	N/A	N/A	• None	
T25	Hybrid Poplar 'Robusta Populus x Canadensis 'Robusta'	U	N/A	✓	N/A	N/A	• None	
T26	Austrian Pine Pinus nigra ssp. Nigra	A1	N/A	N/A	N/A	✓	<ul> <li>Proposed development within proximity to RPA</li> <li>Construction access required within proximity to RPA</li> <li>Removal of impermeable existing hardstanding within RPA</li> <li>Proposed installation of permeable hardstanding within less than 11% of RPA</li> </ul>	



Tree		ory	Remova	al due to	Mitigation	n Required		
Ref.	Species	Category	Works	Condition	Crown	RPA	Aspect of Development affecting retained tree	
T27	Hybrid Poplar 'Robusta Populus x Canadensis 'Robusta'	U	N/A	✓	N/A	N/A	• None	
T28	Common Ash Fraxinus excelsior	C1	N/A	N/A	N/A	N/A	• None	
T29	Common Lime Tilia europaea	B1	N/A	N/A	✓	✓	<ul> <li>Proposed development marginally within RPA</li> <li>Construction access required within RPA</li> <li>Eastern crown spread overhanging footprint of proposed development</li> <li>Removal of impermeable existing hardstanding within RPA</li> <li>Proposed installation of permeable hardstanding within less than 16% of RPA</li> </ul>	
Т30	Common Lime Tilia europaea	B1	N/A	N/A	N/A	✓	<ul> <li>Proposed development within proximity to cannulated nominal RPA</li> <li>Construction access required within proximity to adjusted RPA</li> <li>Removal of impermeable existing hardstanding within RPA</li> <li>Proposed installation of permeable hardstanding within less than 19% of RPA</li> </ul>	
T31	Common Lime Tilia europaea	B1	N/A	N/A	N/A	✓	<ul> <li>Removal of impermeable existing hardstanding within RPA</li> <li>Proposed installation of permeable hardstanding within less than 4% of RPA</li> </ul>	
G32	Group of 7 Common Ash Fraxinus excelsior	B2	N/A	N/A	N/A	N/A	• None	
T33	Common Ash Fraxinus excelsior	B1	N/A	N/A	N/A	N/A	• None	
G34	Group of 5 Lawson Cypress Chamaecyparis lawsoniana 'Pembury blue'	U	N/A	<b>✓</b>	N/A	N/A	Impractical level of mitigation required for the retention of low quality group	
G35	Group of 15 Leyland Cypress X Cupressocyparis leylandii	C2	✓	N/A	N/A	N/A	Removal required to facilitate proposed development	
T36	Copper Beech Fagus sylvatica 'Purpurea'	A1	✓	N/A	N/A	N/A	Removal required to facilitate proposed development	
G37	Group of Lawson & Sycamore	C1	✓	N/A	N/A	N/A	Removal required to facilitate proposed development	
T38	Silver Birch Betula pendula	U	N/A	<b>✓</b>	N/A	N/A	• Dead	
G39	Group of 2 Lawson & 2 Leyland Cypress	U	N/A	N/A	N/A	N/A	• None	



Tree		Jory	Remov	al due to	Mitigation Required			
Ref.	Species	Category	Works	Condition	Crown	RPA	Aspect of Development affecting retained tree	
T40	Common Pear Pyrus communis	C2	✓	N/A	N/A	N/A	Proposed development within RPA and crown spread, impractical level of mitigation required for the retention	
T41	Common Pear Pyrus communis	C2	<b>√</b>	N/A	N/A	N/A	Proposed development within RPA and crown spread, impractical level of mitigation required for the retention	
T42	Common Pear Pyrus communis	C2	<b>✓</b>	N/A	N/A	N/A	Proposed development within RPA and crown spread, impractical level of mitigation required for the retention	
T43	Common Laburnum <i>Laburnum</i> anagyroides	C1	✓	N/A	N/A	N/A	<ul> <li>Removal required to facilitate proposed landscaping scheme, impractical level of mitigation required for the retention</li> </ul>	
T44	Apple Malus domestica	C1	✓	N/A	N/A	N/A	Removal required to facilitate proposed landscaping scheme, impractical level of mitigation required for the retention	
T45	Pissard's Plum Prunus atropurpurea	C1	✓	N/A	N/A	N/A	Removal required to facilitate proposed landscaping scheme, impractical level of mitigation required for the retention	
G46	Common Yew Taxus baccata	C2	<b>√</b>	N/A	N/A	N/A	Removal required to facilitate     proposed landscaping plan (re-planting     proposed)	
G47	Sycamore Acer pseudoplatanus	C2	<b>✓</b>	N/A	N/A	N/A	Removal to facilitate proposed care parking ( re-planting proposed)	



# 2.0 IMPLICATIONS OF PROPOSED DEVELOPMENT UPON THE EXISTING TREE POPULATION (continued...)

# 2.3 Table 2: Mitigation Measures Required for Proposed Development & Existing Tree Conflicts

Tree Ref	Species	Category	Mitigation Required
Т7	Silver Birch Betula pendula	В1	<ul> <li>Erection of tree protection barriers during the entire demolition and construction period as per Tree Protection Plan</li> <li>Installation of permanent non-compacting ground protection within area of off-set tree protection barriers with a permeable finish surface</li> <li>Carful removal of existing hardstanding surface within RPA with use of hand held tools</li> <li>Tree works as described within table 2.4</li> </ul>
G8	Group of Lawson Cypress Chamaecyparis lawsoniana	C2	<ul> <li>Erection of tree protection barriers during the entire demolition and construction period as per Tree Protection Plan</li> <li>Tree works as described within table 2.4</li> <li>Retention of hardstanding within RPA throughout construction period (Immediate installation of non-compacting ground protection if removed prior to completion of construction period)</li> <li>Carful removal of existing hardstanding surface within RPA with use of hand held tools</li> <li>Installation of permeable surfacing replacing area of existing hardstanding</li> </ul>
G9	Group of 3 Sycamore Acer pseudoplatanus	B2	<ul> <li>Part removal of eastern most specimen</li> <li>Retention of hardstanding within RPA throughout construction period (Immediate installation of non-compacting ground protection if removed prior to completion of construction period)</li> <li>Carful removal of existing hardstanding surface within RPA with use of hand held tools</li> <li>Installation of permeable surfacing replacing small area of existing hardstanding</li> <li>Tree works as described within table 2.4</li> </ul>
T14	Group of 11 Field Maple Acer campestre	B2	Erection of tree protection barriers during the entire demolition and construction period as per Tree Protection Plan     Tree works as described within table 2.4
T15	Sycamore Acer pseudoplatanus	A1	<ul> <li>Erection of tree protection barriers during the entire demolition and construction period as per Tree Protection Plan</li> <li>Retention of hardstanding within RPA throughout construction period (Immediate installation of non-compacting ground protection if removed prior to completion of construction period)</li> <li>Carful removal of existing hardstanding surface within RPA with use of hand held tools</li> <li>Installation of permeable surfacing replacing area of existing hardstanding</li> </ul>
T16	Holm Oak Quercus ilex	C1	•Erection of tree protection barriers during the entire demolition and construction period as per Tree Protection Plan
T18	Apple Malus domestica	C1	•Erection of tree protection barriers during the entire demolition and construction period as per Tree Protection Plan



Tree	Species	Category	Mitigation Dequired
Ref	Species	Cate	Mitigation Required
T19	Mountain Ash Sorbus aucuparia	C1	•Erection of tree protection barriers during the entire demolition and construction period as per Tree Protection Plan
Т20	Holm Oak Quercus ilex	C1	Erection of tree protection barriers during the entire demolition and construction period as per Tree Protection Plan     Tree works as described within table 2.4
T23	Common Horse Chestnut Aesculus hippocastanum	В1	<ul> <li>Erection of tree protection barriers during the entire demolition and construction period as per Tree Protection Plan</li> <li>Retention of hardstanding within RPA throughout construction period (Immediate installation of non-compacting ground protection if removed prior to completion of construction period)</li> <li>Carful removal of existing hardstanding surface within RPA with use of hand held tools</li> <li>Installation of permeable surfacing replacing area of existing hardstanding</li> </ul>
G24	Group of 2 Common Ash <i>Fraxinus excelsior</i>	C2	•Erection of tree protection barriers during the entire demolition and construction period as per Tree Protection Plan
T26	Austrian Pine Pinus nigra ssp. Nigra	A1	<ul> <li>Erection of tree protection barriers during the entire demolition and construction period as per Tree Protection Plan</li> <li>Retention of existing hard standing or Installation of non-compacting ground protection within area of RPA where protective barriers have been off-set to allow construction access as per Tree Protection Plan'</li> <li>Use of modified foundation design to allow future unimpeded root development</li> <li>Carful removal of existing hardstanding surface within RPA with use of hand held tools</li> <li>Installation of permeable surfacing replacing area of existing hardstanding</li> </ul>
T28	Common Ash Fraxinus excelsior	C1	•Erection of tree protection barriers during the entire demolition and construction period as per Tree Protection Plan
Т29	Common Lime Tilia europaea	В1	<ul> <li>Erection of tree protection barriers during the entire demolition and construction period as per Tree Protection Plan</li> <li>Retention of existing hard standing or Installation of temporary non-compacting ground protection within area of RPA where protective barriers have been off-set to allow construction access as per Tree Protection Plan'</li> <li>Use of modified foundation design to allow future unimpeded root development</li> <li>Carful removal of existing hardstanding surface within RPA with use of hand held tools</li> <li>Installation of permeable surfacing partly replacing area of existing hardstanding</li> <li>Tree works as described within table 2.4</li> </ul>
Т30	Common Lime Tilia europaea	В1	<ul> <li>Erection of tree protection barriers during the entire demolition and construction period as per Tree Protection Plan</li> <li>Retention of existing hard standing or Installation of temporary non-compacting ground protection within area of RPA where protective barriers have been off-set to allow construction access as per Tree Protection Plan'</li> <li>Use of modified foundation design to allow future unimpeded root development</li> <li>Carful removal of existing hardstanding surface within RPA with use of hand held tools</li> <li>Installation of permeable surfacing partly replacing area of existing hardstanding</li> <li>Tree works as described within table 2.4</li> </ul>



Tree Ref	Species	Category	Mitigation Required
T31	Common Lime Tilia europaea	B1	<ul> <li>Erection of tree protection barriers during the entire demolition and construction period as per Tree Protection Plan</li> <li>Retention of hardstanding within RPA throughout construction period (Immediate installation of non-compacting ground protection if removed prior to completion of construction period)</li> <li>Carful removal of existing hardstanding surface within RPA with use of hand held tools</li> <li>Installation of permeable surfacing replacing small area of existing hardstanding</li> <li>Tree works as described within table 2.4</li> </ul>
G32	Group of 7 Common Ash Fraxinus excelsior	B2	•Erection of tree protection barriers during the entire demolition and construction period as per Tree Protection Plan
T33	Common Ash Fraxinus excelsior	B1	•Erection of tree protection barriers during the entire demolition and construction period as per Tree Protection Plan



# 2.0 IMPLICATIONS OF PROPOSED DEVELOPMENT UPON THE EXISTING TREE POPULATION (continued...)

# 2.4 Table 3: Tree Work

Tree Ref	Species	Category	Schedule of works prior to erection of tree protection barriers
T1	Common Elder Sambucas nigra	C1	Remove to ground level and grind stump
T2	Common Yew Taxus baccata	C1	Remove to ground level and grind stump
G3	Mixed Group	U	Remove to ground level and grind stump
T4	Lawson Cypress Chamaecyparis lawsoniana	U	Remove to ground level and grind stump
T5	Common Holly Ilex aquifolium	U	Remove to ground level and grind stump
Т6	Common Laburnum Laburnum anagyroides	C1	Remove to ground level and grind stump
T7	Silver Birch Betula pendula	B1	Crown lift to provide minimum 3.0m clearance above ground level
G8	Group of Lawson Cypress Chamaecyparis lawsoniana	C2	Carry out maximum 2.0m lateral reduction of the overhanging north-eastern crown to provide suitable clearance from the proposed parking area
G9	Group of 3 Sycamore Acer pseudoplatanus	B2	Remove eastern specimen to ground level and carefully grind stump below ground level      Crown lift to provide minimum 4.0m clearance above ground level
T10	Group of 11 Common Yew Taxus baccata	C2	Remove to ground level and grind stump
T11	Common Ash Fraxinus excelsior	C1	Remove to ground level and grind stump
T12	Sycamore Acer pseudoplatanus	C1	Remove to ground level and grind stump
G13	Lawson Cypress Chamaecyparis lawsoniana	U	Remove to ground level
T14	Group of 11 Field Maple Acer campestre	B2	Carry out maximum 1.5m lateral reduction of the overhanging north-western crown to provide suitable clearance from the proposed pedestrian path
T17	Common Ash Fraxinus excelsior	U	•Remove to ground level
T20	Holm Oak Quercus ilex	C1	Crown lift to provide minimum 2.5m clearance above ground level
T21	Common Ash Fraxinus excelsior	U	Remove to ground level
T22	Bird Cherry Prunus padus	U	•Remove to ground level



Tree Ref	Species	Category	Schedule of works prior to erection of tree protection barriers
T25	Hybrid Poplar 'Robusta Populus x Canadensis 'Robusta'	U	Remove to ground level (retain wood on site for habitat)
T27	Hybrid Poplar 'Robusta Populus x Canadensis 'Robusta'	U	Remove to ground level (retain wood on site for habitat)
T29	Common Lime Tilia europaea	B1	Crown lift to 3.0m above ground level     Carry out a 3.0m height and lateral crown reduction to provide clearance from proposed development
T30	Common Lime Tilia europaea	B1	Crown lift to provide minimum 2.5m clearance above ground level
T31	Common Lime Tilia europaea	B1	Crown lift to provide minimum 2.5m clearance above ground level
G34	Group of 5 Lawson Cypress Chamaecyparis lawsoniana 'Pembury blue'	U	Remove to ground level and grind stumps
G35	Group of 15 Leyland Cypress X Cupressocyparis leylandii	C2	Remove to ground level and grind stumps
T36	Copper Beech Fagus sylvatica 'Purpurea'	A1	Remove to ground level and grind stump     Provide suitable replacement planting to mitigate against loss of tree
G37	Group of Lawson & Sycamore	C1	Remove to ground level and grind stumps
T38	Silver Birch Betula pendula	U	Remove to ground level and grind stump
T40	Common Pear Pyrus communis	C2	Remove to ground level and grind stump
T41	Common Pear Pyrus communis	C2	Remove to ground level and grind stump
T42	Common Pear Pyrus communis	C2	Remove to ground level and grind stump
T43	Common Laburnum Laburnum anagyroides	C1	Remove to ground level and grind stump
T44	Apple Malus domestica	C1	Remove to ground level and grind stump
T45	Pissard's Plum Prunus atropurpurea	C1	Remove to ground level and grind stump
G46	Common Yew Taxus baccata	C2	Remove to ground level and grind stump
G47	Sycamore Acer pseudoplatanus	C1	Remove to ground level and grind stump



## 3.0 SUMMARY OF IMPLICATIONS ASSESSMENT

# 3.1 Table 4: BS: 5837 Categories & Tree Loss

BS: 5837 Category	Number		
A	1		
В	1 (part of)		
С	16		
U	10		
Total	28		

# 3.2 Tree Loss

The construction of the proposed development, infrastructure and hard landscaping will require the removal of the following:

28 individual trees and groups of trees as classified within the table 3 (section 2.4) above.

The scheme has recommended the removal of a 10 category U trees on the grounds of sound arboriculture advice regardless of the proposed development.

To facilitate the proposed development and landscaping scheme 16 category C trees and groups have been recommended for removal as there retention is either unachievable or the level of mitigation required impractical for the quality of the tree / group. The removal of Common Elder (T1), Common Yew (T2) & Laburnum (T6) as well as the removal Yew group (G46) and Sycamore (T47) will be most noticeable due to their location adjacent to the public highway of Woodcote Green Road. The anticipated loss of these poor specimen trees / groups associated with this project are deemed to have a limited impact on the local amenity and overall green landscape however appropriate replacement planting to the southern boundary as part of the landscaping proposal will go some way into mitigating against the loss of these trees.

The most eastern specimen within the Sycamore group (G9) is required to facilitate the proposed new path and access road to the main carpark. The three sycamores are growing together to form a combined crown however the eastern most specimen has an obvious asymmetrical lean and crown bias and as such it is not deemed that its removal will not have a significant impact on the remaining group.

The Hybrid Poplar (T27) has been identified as a tree of ecological importance due to its high potential for occupying roosting bats. This tree has been identified to be of limited arboriculture value due to previous management and current structural condition and has subsequently been classified as a U category tree. Due to its ecological importance further testing was carried out on the Hybrid Poplar (T27). The results from the Arboricultural report Ref: BH/190480/sh identified the tree as being of a significantly compromised structural condition and as such its retention is not supported from an arboriculture perspective and should be removed on health and safety grounds regardless of the development.

Due to the demand for development on site it is regrettable that the Copper Beach (T36) has been identified for removal in order to facilitate the proposed scheme. Removal of this tree on the local amenity and landscape is deemed to be reduced by its relatively secluded location within the rear of the site limiting it visibility from a public point of view. Due to the loss of this Category A tree, replacement planting of a suitably sized specimen should be proposed within the planting plan which would go some way into mitigating against its loss.



# 3.0 SUMMARY OF IMPLICATIONS ASSESSMENT (Continued...)

# 3.3 Discussion of Impacts

#### **Deviation of Nominal Calculated Root Protection Areas**

In accordance with 4.6.3 of the BS5837: 2012 "the RPA for each tree should initially be plotted as a circle centred on the base of the stem. Where pre-existing site conditions or other factors indicate the rooting has occurred asymmetrically, a polygon of equivalent area should be produced. Modifications of the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution."

As such the RPA on T7, G8, TG14, T15, T20, T23, T25, T26, T27, T28, T29, T30, T31, G32 & T33 have all been modified in accordance with this guidance as shown within the Tree Protection Plan due to their locations on the edge of the existing impermeable hardstanding car parking areas.

# **Direct Impacts:**

The primary arboriculture constraint in relation to the current proposed scheme is the proximity of the 4 storey building to the western boundary to the RPA of the retained Austrian Pine (T26) and Common Lime (T30) and partial encroachment with RPA of Common Lime (T29).

Within all three instances the likelihood of significant root spread to the eastern quadrants is deemed to be limited as reflected within the TPP and not to the extent of the nominal RPA's identified within the TCP. This assumption is based on the presence of existing impervious hardstanding currently serving as car parking creating an inhospitable rooting environment deemed unsuitable for root development with a more suitable rooting environments identified within land of the adjoining properties.

Protection of these trees will be provided through the installation of protection barriers. It will be necessary to offset this tree protection to G9, T15, T23, T26, T29, T30 & T31 to allow for an area suitable to enable the construction and landscaping to take place. As these areas are all currently of existing hardstanding the surfaces as highlighted within the TPP should be retained in-situ throughout the construction period providing effective ready-made non-compacting ground protection. If it is necessary to remove any of these areas prior to the completion of construction works on site then it must be immediately replaced with suitable no-compacting ground protections as identified within Arboricultural Method Statement – Non Compacting Ground Protection - Appendix 2.

The re-landscaping of the site proposes the removal of a large amount of existing hardstanding impermeable surface area and replacing this with areas of soft landscaping including bedding areas, planted boarders mixed grasses & wild flowers and areas laid to lawn as well as the installation of hardstanding crushed or pours resin bound gravel path. This proposed scheme will greatly improve the current rooting environment for a number of the existing and retained trees.

As a secondary phases of works (once construction on site is complete) where removal of the existing hardstanding is required within the RPA of retained trees it should be carried out carefully with the use of hand tools or appropriate machinery (under arboricultural supervision) working backwards over the area, so movement over the exposed ground is limited.

The current proposed scheme requires an approximate 31% encroachment within the RPA of Silver Birch (T7) in order to provide vehicle parking. As such a permanent non-compacting 3D cellular confinement system must be installed within this area as shown within the TPP. The construction of the finished surface must be of a permeable material or constructed within a way to allow for water to permeate to the roots below. Further information on the construction and installation can be found within Arboriculture Method Non Compacting Ground Protection – Appendix 2. Removal of existing hard standing within the RPA will go some way into mitigating against the proposed installation of new hardstanding.



#### 3.0 **SUMMARY OF IMPLICATIONS ASSESSMENT (Continued...)**

#### 3.3 **Discussion of Impacts (Continued...)**

The footprint of the proposed building falls within the crown spread and marginally within the adjusted RPA (approx. 14% of the nominal calculated RPA) of the Common Lime (T29). A 3.0m lateral and height reduction has been recommended within table 3 (section 2.4) of this report, required to provide suitable clearance from the proposed building.

The proposed foundation design is to be of a pile construction which will allow for continued and unimpeded development of the retained trees within proximity (T26, T29 & T30) once the construction works are complete.

# **Indirect Impacts:**

Indirect impacts such as soil compaction, construction access and traffic are addressed from an arboricultural perspective by proposed areas of existing hardstanding serving as ground protection and areas outside the RPA of retained trees. Furthermore, careful phasing of site operations to control the number of operatives, equipment and materials on site will prevent further conflicts between the competing needs of development, tree retention and protection.

Designated areas of material storage, delivery of goods, the locations of site huts and other site amenities, have not been detailed at this stage but there are areas within the grounds of the property which can be used for these purposes.

Any plant or lifting equipment during demolition or construction, such as cranes, will be located so that no direct damage can be caused to the aerial parts of retained trees. A banksman/slinger must be present at all times during operations.

#### 3.4 **Infrastructure Requirements**

Ground use planning should form part of the development project, with existing and/or proposed utility corridors identified on the proposed plans. It is strongly recommended that service ducts are shared across the service providers to limit further ground works and site disturbance.

Proposed service runs should be designed with full consideration to the guidance and recommendations of National Joint Utilities Guidelines No.10 - Volume 04: Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees and avoid the notional RPA of retained trees in all circumstances, in the first instance.

If services are proposed through a notional RPA of any retained tree, professional arboricultural advice must be sought to ensure that any potential impact is kept to a minimum. Proposed trenches will be highlighted for excavation using an air spade or thrust boring techniques should be employed to install underground utility services beneath the tree rooting zones.



# 3.0 SUMMARY OF IMPLICATIONS ASSESSMENT (Continued...)

# 3.5 Erection of Tree Protection Barriers and Laying of Non-Compacting Ground Protection

In order to safeguard the retained trees on and adjacent to the site, it will be necessary to erect tree protective barriers prior to the commencement of works on site and to ensure that they remain in-situ for the duration of the project, unless otherwise directed.

The retention of the existing hardstanding has been recommended as a suitable and effective form of ground protection to be retained throughout the construction process. If removed prior to the completion of construction on site it must be replaced immediately with a suitable non-compaction ground protection.

The report has also recommended the installation of permanent non-compacting ground protection where there is a need for hardstanding areas within the RPA of trees not previously covered with an existing hardstanding surface.

# 3.6 Shading of Retained Tree

The Austrian Pine T26 and Common Lime T29 are deemed to have a limited shading effect on the proposed development.

Further design features can be roof lighting, wider bay windows and doors, or reviewing the orientation of floor plans and living spaces where sunlight is more desirable to ensure natural and ambient light reaches these spaces.

# 3.7 Potential Growth and/or Nuisance of Retained Trees

Suitable ongoing management and cyclical pruning of the Common Limes T29, T30 & T31 will ensure suitable clearance is maintained between the trees and the proposed development as well as limit any issues of shading.

Trees are naturally growing and shedding organisms which can cause a seasonal nuisance, particularly in the autumn when the leaf litter of some species can block gullies and gutters. Fruit can cause slippery patches and accumulation of honeydew can be damaging to surfaces and vehicles.

These 'common nuisance' can be addressed through careful and site specific design including: filtration for rainwater guttering of either mesh or "bristle" inserts; the incorporation of discreet ladder attachment points under the eaves; sufficient clearance between the edge of the roof and the guttering to facilitate ease of maintenance; fitting the downpipes with easily cleanable traps. There are controls available to limit aphid damage to trees, which cause honeydew, and low impact car ports can be considered for parking within the proximity of trees.

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# 4.0 APPRAISAL OF TREE LOSS & RETENTION

# 4.1 Table 5: Summary of Trees

BS: 5837	Remove	Retained			
Category	nemove	Tree work	No works		
A	1	0	2		
В	1 (part of)	5	3		
С	16	2	5		
U	11	0	1		
Total	29	7	11		



5.0 **BACKGROUND INFORMATION** 

#### 5.1 **Table 6: Names and Contact Numbers of Parties Concerned**

Table to be completed prior to commencement of construction activities.

Contact Name	Company / Organisation	Role	Telephone Numbers
*********	Guild Living	Owner	*********
Ms R Pacifici	Cast Real Estate & Construction Consultancy	Developer	0203 931 0200
Mr D Ranu	Marchese Partners	Architect	020 3735 9755
Mr Haddock	Andy Sturgeon Design	Landscape Architect	01273 672 575
Mr G Davies	Bartlett Tree Experts Ltd.	Arboricultural Consultant	01272 825 090
**********	*********	Site Manager	*********
Gemma Turner	Arup	Ecologist	020 7636 1531
******	Epsom & Ewell Borough Council	Planning Officer	*******
******	Epsom & Ewell Borough Council	Tree Officer	*******

#### 5.2 **Availability of this Arboricultural Method Statement**

Copies of this document shall be made available for all site visits. The appointed Site Manager and Main Contractor shall each hold a copy of this document, including the supporting Tree Protection Plan.

#### 5.3 **Discharge of Planning Conditions**

It is highly likely that Epsom & Ewell Borough Council, if minded to 'consent' the planning application, will subject this report and specific sections of it as conditions of planning approval. If subject to a tree-related condition, this report and its contents will form legal requirements during all phases of development.

Arboricultural planning conditions cannot be effectively discharged without site supervision by an Arboricultural Consultant. Any supervisory action must be confirmed by formal letters or log entries circulated to all relevant parties, including the Council. These records of site visits will provide proof of compliance and allow planning conditions to be discharged as the development progresses.

The proposer or his agent shall instruct an Arboricultural Consultant to enable compliance with the Local Planning Authority requirements set out in the planning conditions, before any work begins on site.



## 6.0 SUPERVISION AND MONITORING

# 6.1 Monitoring and Supervision

All required arboricultural supervisory works and monitoring visits must be confirmed by formal correspondence circulated to all relevant parties, including the local planning authority. These detailed records of site visits will provide proof or compliance.

# 6.2 Phasing of Arboricultural Involvement throughout the Development

Contained within table 6 (Section 7) is a list and details the events in relation to trees that require arboricultural involvement.

# 6.3 Recommendations for Site Monitoring and Supervision

A pre-commencement meeting should be held on site before any of the tree work, demolition and construction work begins. This should be attended by the appointed Site Manager and the Arboricultural Consultant. The Arboricultural Consultant will inform the local planning authority (Epsom & Ewell Borough) in writing of the details of any meeting held. All tree protection measures detailed in this document must be discussed so that they are fully understood by all the parties. Clarification or modifications to the consented details must be recorded and circulated to all parties in writing. These documents should then form the basis of any supervision arrangements between the Arboricultural Consultant and the proposer, as agreed with the local planning authority where applicable.

The Arboricultural Consultant will visit during the phases as set out in section 7.0. The Consultant's role is to advise on the development in relation to the trees, as well as liaise as necessary between the Site Manager and the local planning authority to ensure that appropriate protection measures are in place. The role will involve monitoring compliance with any/all arboricultural conditions (where applied) and advising on any tree related problems as they arise. A development site monitoring form (please see Appendix 4 for an example), will be completed by the Supervising Arboriculturist during each site visit, to include the following;

- 1. Date of visit.
- 2. List of those in attendance on site.
- 3. Findings in relation to trees.
- 4. Details of any non-compliance.
- 5. Recommendations to be actioned so that the non-compliance is addressed and remedied.
- 6. List of the parties concerned to whom the monitoring sheet has been sent.
- 7. Date that Monitoring sheet emailed/ posted to the recipients.

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BS: 5837 Arboricultural Method Statement & Tree Protection Plan (V.1)



# 6.0 SUPERVISION AND MONITORING (continued...)

# 6.4 Site Management

It is the Site Manager's responsibility to ensure that the requirements set out within the Arboricultural Method Statement are known and understood by all site personnel. Copies of pertinent documents should be kept on site at all times. The site manager will brief all personnel who may have an impact on any trees and relay specific tree protection requirements. This methodology should be a part of all site induction procedures and written into appropriate site management documents.

The following pertinent points should be explained to all personnel who could have an impact on trees;

- 1. The specification of the Protective Barriers around retained trees.
- 2. The requirement for Protective Barriers to be sufficiently robust to prevent incursion by construction activity.
- 3. Why it is essential that the Protective Barriers remain throughout the works.
- 4. The importance of the 'exclusion zones' around retained trees.
- 5. The potential damage caused to trees by compaction of soils.

#### 6.5 Variations

Any variations to the tree protection measures will need to be agreed in writing by the local planning authority before implementation. The variation will be set out in writing, detailing the reasons leading to the change and the modifications required.



# 7.0 SEQUENCE OF EVENTS

# 7.1 Table 7: Sequence of Events

Sequence	Description	Arboricultural Input
1	Pre-commencement site meeting	Site visit
2	Installation of Tree Protective Barriers, as shown on the Tree Protection Plan (TPP).	Site visit – to check adequacy and location of Tree Protection Barriers.
3	Sufficient retention of existing hardstanding and suitable installation of non-compacting ground protection where required	Site visit – to check retention of hardstanding and installation of ground protection
4	Site visit ensuring protective measures are in place	Site visit – carried out at regular intervals throughout the construction period
5	Inspection once construction works on site are complete to remove / adjust tree protection accordingly and oversee removal of existing hard standing with RPA of retained trees	Site visit – to check and where appropriate remove / re-position protective barriers to allow for landscaping to commence
6	Re-inspection of all retained trees	Site visit – to carry out the inspection of all retained trees within one month following completion of construction works.



#### **APPENDIX 1: TREE PROTECTION BARRIERS**

Protective barriers must be erected before the commencement of any works on site (other than those set out in the schedule of tree works, contained in this document). The location of the barriers is illustrated on the Tree Protection Plan. However, it must be noted that these locations are indicative at present, construction methodologies may evolve such that the barrier locations may require amendment or supplementing.

The barriers are to be erected to exclude construction activity in the RPAs of retained trees.

The barriers will remain in place until completion of the main construction phase and then only removed with the agreement with the consulting Arboriculturist.

Other than works detailed within this method statement or approved in writing by the local planning authority, no works shall take place within the exclusion zones defined by the protective fencing prior to construction works completing on site. No vehicles will be allowed to enter areas to be protected by fencing.

# **Specification of Protective Barriers**

Given the intensity and scale of development, as well as the quality and condition of the retained trees, vertical barriers will be of the default specification as detailed within Figure 1, Appendix 1.

The barriers should be fit for purpose of excluding construction activity. At this site, it is considered sufficient to install two-metre-tall welded mesh or solid panels on concrete/rubber feet (please refer to Figure 1 Appendix 1). The fence panels (Heras type) should be joined together using a minimum of two anti-tamper couplers and installed so they can only be removed from the inside. The distance between the fence couplers should be at least 1 metre and should be uniform throughout the protective barrier.

The panels should be supported on the inner side by angled stabilizer struts installed every 3.5 metres at the join of the fence panels. Both the concrete/rubber feet and the stabiliser strut base plates should be secured with ground pins. Where fencing is to be erected on retained hard surfaces or it is otherwise unfeasible to use ground pins stabilizer struts should be mounted on a block tree.

The specification of the temporary barriers will be installed in accordance with the specification as discussed in the paragraph above and referenced in Figures 1a and 1b.

Notices will be affixed to all protective fencing 'Tree Protection Area - Keep Out' (please refer to Figure 2).



# **APPENDIX 1: TREE PROTECTION BARRIERS (continued...)**

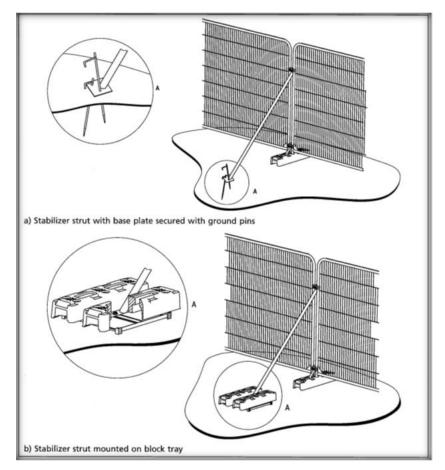


Figure 1: Showing the Two Types of Tree Protection Barrier, as per BS: 5837 (2012)



Figure 2: Showing Appropriate on Site Notices to Apply to Tree Protection Barriers.



## **APPENDIX 2: NON-COMPACTING GROUND PROTECTION**

Due to the need for a 'working zone' and temporary construction access within the RPA of Silver Birch T7, prior to any the introduction of any building materials and/or supplies, immediately following the completion of tree pruning operations, ground protection in accordance with the below specifications must be established. This ground protection must also be installed if the proposed existing hardstanding surfaces within the offset RPA of any of the retained trees is removed prior to completion of onsite construction.

Ground protection must be created using a non-dig, 3D, cellular confinement system. There must be no excavations of the existing ground below that of the pre-existing sub-grade. Any levelling to achieve a flat surface prior to installation shall be made using soil or aggregate infill of hollows to create the site level.

The confinement cells will be in-filled using hand shovels, carefully fill the confinement system with 4/20mm 20/40mm clean and coarse angular stone chippings (no fines) to the appropriate depth for the weight and size of vehicles, and spread and levelled to form a wearing surface.

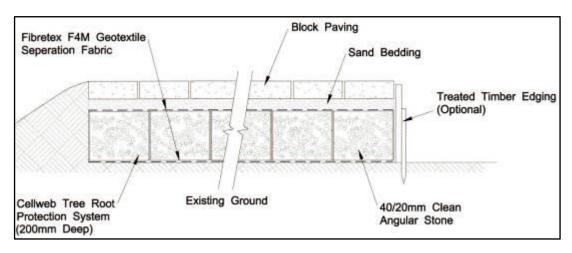


Figure 3: Cross-section of Non-dig Cellular Confinement System

The 3D cellular confinement system itself can be driven across, or a suitable surfacing used. The depth of the 3D cellular confinement system shown above is 200mm, the actual depth required will be dependent on the manufacturers recommended specification based on the weight of vehicles.

## **Product Performance Specification**

The cellular confinement system must be constructed of a high density polyethylene (HDPE) with perforated and textured side walls to allow for the movement of water and air as well as friction and interlocking. Depth of the cells can range from 75 millimetres - 200 millimetres, however final specification to be supplied by manufacturer.



## **APPENDIX 3: WORKING WITHIN TREE ROOT PROTECTION AREAS**

# **Breaking-up of Existing Hard-surfacing**

- 1 Pre-existing concrete and/or tarmac within the root protection area (RPA) of retained trees where required must be broken-up using hand held tools only, such as a pneumatic drill, a pneumatic hammer, and/or a sledgehammer under direct arboricultural supervision.
- 2 Broken pieces of concrete, tarmac and stonework within the tree RPA must be carefully lifted using hand tools such as a crowbar, pick-axe, or maul. No machinery is to be employed during this phase of operations.
- 3 Where appropriate once the sub-base has been reached, this is to be retained and proposed finish surface installed
- 4 Removal of the sub-base to achieve the sub-grade within the RPA of a number of retained trees must be undertaken and completed using hand tools only, under Arboricultural supervision. Acceptable tools include: spades; shovels; trowel; narrow trenching shovel; pick-axe and cutting maul should the material be heavily compacted.



#### APPENDIX 4: GENERAL SITE CONDITIONS AND TREE PROTECTION MEASURES

# **Storage of Materials**

Designated areas for storage of materials and site office will be decided by the Site Manager before any works can commence.

# **Discharge of Contaminants**

No materials that are likely to have an adverse effect on tree health, such as oil, bitumen or cement will be discharged within the RPA of any of the trees to be retained. It is advised that the disposal of all waste materials is carried out in an appropriately sustainable fashion.

# **Contingency Plans**

Should there be any contamination of soils either within or adjacent to the RPA these should be dealt with as quickly as possible with a proprietary emergency clean up kit. The situation should then be assessed as to whether it is appropriate to remove soils. An Arboriculturist should be consulted before a decision is made. The protection barriers erected should be easily removable to access the area in event of an emergency.

# Changes in Ground Levels and Soft Surface Ground changes within the RPA's of trees

It is considered certain operations may require ground level changes but these changes should be limited to a minimum. Landscaping operations within the RPA of trees to be retained should be carried out with minimum disruption to the existing landscape avoiding removal of topsoil and re-introduction of foreign soils.

Where there are areas to be re-turfed within the RPA of trees to be retained, existing turf should be removed with minimum disruption to the soils, removing no more than 25 to 50mm of topsoil. Similarly, in the new amenity grassed areas that encroach into the RPAs, the ground levels should not be raised in excess of 50mm above existing. Soils used should be from the site or clean imported topsoil.

# Access to the area of proposed works

It is likely that the main access to the site will be via the Woodcote Green Road. It is considered that this will be the only access points into the site for the purposes of carrying out the development as proposed. If there are any other proposed access points into the site, this should be agreed prior to use with the Project Arboriculturist.

#### **Cranes and Lifting Equipment**

All lifting equipment, including cranes if utilised, should be so positioned that they operate without contact with the retained trees. Care must be taken so that the arc of the boom fitted to the lifting equipment is sufficiently clear of the retained trees.

# **Boundaries/Scope of the Site**

The appointed Arboricultural Supervisor must be consulted if the site boundaries of the site are extended or if excavations/ storage/ construction related to this development is to be carried out on other parts of the site, outside of the development site as indicated on the Tree Protection Plan.

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# APPENDIX 5: BARTLETT TREE EXPERTS LTD SITE MONITORING FORM

Arboricultural Consultant's Details
Consultant's Name:
Tel:
Mobile:
Development Site Details
Address:
Planning Application Ref:
Local Authority Details (LPA):
LPA:
LPA Tree Officer:
LPA Planning Case Officer/ Contact:
Developer's Details
Developer name:
Address:
Contractor Details:
Contractor name:
Contact name:
Date
Stage of Development
Stage of Development
Purpose of Visit
Protective Barriers
Ground Protection
Commention
Compaction
Damage to Retained Trees
Dumage to netamen rices
Other Notes
Photos Attached
Further Action Required:
Date of Next Site Visit:
Date of Next Site Visit.
Date issued to LPA: Signed:



#### **APPENDIX 6: LIMITATIONS OF REPORT**

# **Limitations of the Arboricultural Implications Assessment**

- This assessment is based upon information obtained from the BS: 5837 Tree Survey.
- All dimensions and measurement are based upon previously obtained data the BS: 5837 Tree Survey and from drawings provided to Bartlett Consulting.
- This assessment considers the possible implications to the proposed built structures. Suggestions from an arboricultural perspective may be provided outlining an alternative site layout. Such suggestions must be considered by the project Architect/Designer/or Engineer before implementing any suggestions.

#### Data on which the Assessment is Based

- Validity, accuracy and findings of the report are directed by the accuracy of information provided to Bartlett Consulting at the time of conducting the tree survey and during report writing.
- Checking of independent data/information will not be undertaken, with particular reference given to scaled maps and drawings provided to Bartlett Consulting

# **Validation of the Assessment**

- The assessment considerations/findings in this report remain valid for a period of one year, from the date of issuance.
- Such considerations/findings will become invalid if any building works are undertaken, soil levels altered, or any unsolicited tree works undertaken.
- If any alterations to the existing building structures, or soil levels, or if any unsolicited tree works have been completed, it is the recommendation of Bartlett Consulting that a new BS: 5837 Tree Survey/report is undertaken to reflect these changes.

### **Limitations of the Arboricultural Method Statement**

- Please also refer to sections 1.3 at the beginning of this report.
- The report is based on information provided by third parties and the specifications and recommendations are dependent upon information provided therein.
- This report does not consider the possible implications to any present or future built structures other than those considered within the report.

### Findings of the Survey and the Report

- Validity, accuracy and findings of the report are directed by the accuracy of information provided to Bartlett Consulting at the time of conducting the tree survey and during report writing.
- Checking of independent data/information will not be undertaken, with particular reference given to scaled maps and drawings provided to Bartlett Consulting

## **Timing of the Survey and the Report**

- The considerations/ findings in this method statement are valid for one year.
- Such considerations/ findings will become invalid if any building works are undertaken, soil levels are altered or tree work undertaken outside of the scope of works as detailed and presented at the time of compiling this report.
- If there are any alterations to either the property or soil levels, or if tree works are carried out, it is recommended that a new tree report is undertaken.

## **Trees in Relation to Other Properties:**

- This report/survey only considers the trees in relation to the site as identified.
- It does not comment on possible effects of trees on neighbouring properties, including in relation to subsidence or heave, or with regard to possible hazards presented by trees surveyed.
- Neighbouring owners of trees that are identified as posing a possible risk to the property/site in question should seek their own advice as to possible effects of the recommendations given within this report.
- Damage to, or possibility of damage to, any other structure that is not referred to within the report is not considered unless otherwise specified. This includes both neighbouring structures and any other structure on the property.

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# **APPENDIX 6: LIMITATIONS OF REPORT (continued...)**

# Trees in Relation to Subsidence, Heave and Direct Damage

- This report does not deal with issues relating to subsidence or heave in relation to any built structures and surrounding vegetation whether the structure or vegetation falls within the boundaries as considered or lies beyond the boundaries.
- The report does not consider issues relating to subsidence or heave in relation to any proposed built structures or future vegetation whether within the boundaries as considered or beyond the boundaries
- It is prudent to consider the effects of heave on any property if trees are removed.
- Similarly, the issue of direct damage (when the roots of a tree have physical contact with a structure) is not considered within this report.

# **Trees Subject to Statutory Controls:**

- Whilst Bartlett Consulting has made attempts to ascertain if any of the trees subject to this report are 'protected', their status is always subject to change. Therefore the final responsibility for checking statutory protection for trees rests with the employed contractor and not with Bartlett Consulting
- Any prescribed tree works to a protected tree are provided due to perceived hazard and risk, and should be considered acceptable by the Local Planning Authority (LPA). However appropriate notification must still be provided to the LPA as they may take an alternative point of view.

# **Trees are Subject to Environmental Factors:**

• The statements, findings and preliminary recommendations made within this report do not take into account any effects of extreme climate and weather incidences, vandalism, changes in the natural and built environment around the tree(s) after the date of this report, nor any damage whether physical, chemical or otherwise.

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We trust that the contents and recommendations contained within this report were informative, easy to understand and helpful to you, with regards to managing your tree. Should you have any further questions or concerns, please do not hesitate to contact us again.

**REPORT CLASSIFICATION:** BS: 5837 Arboricultural Method Statement & Tree Protection Plan

**REPORT STATUS:** Final

**REPORT COMPLETED BY:** Mr G Davies FdSc Arb

Arboricultural Consultant

**DATE:** 11<sup>th</sup> December 2019

**SIGNATURE:**