JAMES BLAKE ASSOCIATES

Arboricultural Method Statement

Former entrance lodge, Harefield Grove, Rickmansworth Road, Harefield

On behalf of

Comer Homes

18 August 2020

JBA 20/027 AR03

Over 30 Years of Service, Value and Innovation

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Project	Former entrance lodge, Harefield Grove, Rickmansworth Road, Harefield
Report	Arboricultural Method Statement
Date	18 August 2020
Author	Simon Smith *TechArborA*
Checked by	Kevin Slezacek *DipArb MArborA MCIHort*

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1 SUMMARY

1.1 This Arboricultural Method Statement (AMS) has been commissioned by Comer Homes to ensure retained trees and vegetation are adequately protected during the reinstatement of the former entrance lodge as two dwelling units, and to satisfy planning condition 10 of planning consent 28301/APP/2013/3104.

1.2 This report has been prepared in accordance with British Standard 5837: Trees in relation to design, demolition and construction – Recommendations (2012) and The National Joint Utilities Group (NJUG) Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees Volume 4 Issue 2 (2007). These documents provide best practice advice, assessment and guidance to ensure the protection of trees and significant vegetation on development sites.

1.3 In order to successfully work in close proximity to trees, the methods described within this document should only be carried out in conjunction with the direct appointment of a qualified arboricultural consultant. Failure to implement the approved tree protection measures and procedures could lead to enforcement action, the destabilisation of trees and/or the ultimate death of the trees.

Definitions

1.4 Construction Exclusion Zone (CEZ) – a fenced off area based upon the root protection area that is prohibited for the duration of a project (unless subject to supervised works)

1.5 Root Protection Area (RPA) – a layout design tool indicating the minimum area around a tree containing sufficient roots to maintain a trees viability.

1.6 Supervised works – demolition or construction works that require specific arboricultural advice and supervision to prevent damage from occurring.

Scope

1.7 This method statement addresses the following;

- Tree protection specifications and requirements
- Construction methodologies
- Landscaping works

2 LIMITATIONS

2.1 Trees are dynamic, living organisms whose health and condition can change quickly. Any changes to a tree, or to trees and the land surrounding it, may affect the tree's condition and/or stability. If any such changes occur further examination would be required and may affect the validity of this report.

2.2 The survey is not intended to be a detailed tree hazard assessment. Where significant faults that pose an immediate risk to persons or property are observed recommendations will be made; however the lack of any management recommendations within the survey schedule does not infer that a detailed health and safety assessment has been made and it is recommended that a formal management and inspection plan is considered.

3 GENERAL TREE PROTECTION MEASURES

3.1 No fires will be permitted within 20m of the crown of any tree.

3.2 No alterations in soil levels other than those already agreed, will occur within the Construction Exclusion Zone (CEZ) without prior agreement from the appointed arboricultural consultant.

3.3 No materials, vehicles, plant or personnel will be permitted into the CEZ at any time without prior consent from the arboricultural consultant.

3.4 Any liquid materials spilled on site will be immediately cleared up and removed from the site. If liquid fuel or cement products are spilled within 2m of the tree protection zone, the contractor will report the incident to the arboricultural consultant immediately.

3.5 The contractor will report any damage to trees or shrubs, whether caused by construction activities or from any other cause, to the arboricultural consultant immediately.

4 TREE PROTECTION

Protective fencing specification

4.1 Protective fencing will be installed prior to any enabling works, demolition or construction activity commences.

4.2 The position of protective fencing is shown on drawing JBA 20/027 TP04 at Appendix 2.

4.3 Protective fencing will be constructed of weld mesh panels securely fixed to a static framework fit for the purpose of excluding construction traffic.

4.4 Alternative specifications to those shown must be agreed prior to installation by the local authority and arboricultural consultant.

4.5 All weather signage will be securely fixed to panels at regular intervals stating the purpose of the fencing and contact details of the arboricultural consultant. A suggested sign can be found at Appendix 3 and may be copied for use on site.

4.6 Upon completion of tree protection, the site manager will invite the arboricultural consultant to inspect and sign off the specification and position of all tree protection.

4.7 Once installed, protective fencing will remain in position for the duration of the project or until it requires removal to a specified alternative position to allow for works.

5 SUPERVISION REQUIREMENTS

5.1 The arboricultural consultant will be available for ongoing advice and design input to ensure works close to trees is avoided or correctly specified.

5.2 Any works that could impact upon retained trees will be supervised and monitored by the arboricultural consultant. It is suggested that as a minimum supervision visits will occur as follows;

- Inspection of protective fencing prior to the construction phase

6 CONSTRUCTION

Manual excavation within RPAs

6.1 This section applies to the driveway and path construction as well as any additional works that may require excavation within RPAs at any time during construction e.g. service trenches, wall construction.

6.2 All works within Root Protection Areas (RPAs) will be carried out under the direct supervision of the appointed arboricultural consultant (JBA).

6.3 No site personnel will enter these areas until a representative from JBA is present.

6.4 A section of protective fencing will be temporarily removed to provide access to the required area.

6.5 Where necessary, the appointed arboricultural consultant will specify the location of temporary ground protection and the level of protection required.

6.6 Excavations will be carried out manually using appropriate hand tools OR using an air lance to expose tree roots.

6.7 No machinery will be permitted into the working area unless agreed by the arboricultural consultant.

6.8 All excavated spoil will be manually removed from the area or placed on temporary ground protection to be used for back filling upon completion.

6.9 All roots in excess of 25mm in diameter and all clumps of fibrous roots greater than 25mm in diameter will be retained and wrapped in dry hessian during the works to prevent desiccation.

6.10 Roots less than 25mm may be pruned by the arboricultural consultant where deemed essential to complete works.

6.11 Root pruning will only be carried out by the arboricultural consultant, using sharp, sterile tools suitable to the size of the root to be cut. Where possible roots will be pruned cleanly back to a side branch.

6.12 Prior to backfilling any hessian wrapping will be removed from retained roots.

6.13 The roots will then be surrounded with topsoil, sharp sand (builders' sand will not be used due to its high salt content) or other loose inert granular fill, before soil or other medium is replaced. This material should be uncontaminated and free from injurious objects.

6.14 Temporary ground protection will be removed in a backwards direction away from the tree so as always to be positioned on protection and not on unprotected ground.

6.15 Once the work area is cleared of ground protection the recently backfilled spoil will be watered and the removed section of protective fencing reinstalled.

7 LANDSCAPING

7.1 Prior to works commencing the appointed arboriculturist will meet with the landscape contractor to discuss and agree the appropriate methodology to be used.

7.2 The Landscape contractor will provide a detailed method statement for the arboriculturist's approval before works start. This method statement will detail the following;

- Tree Protection
- Cultivation within RPAs
- Planting methodology
- Soil levels
- Machinery and tools
- Delivery of materials
- Ground protection requirements
- Hard landscape implementation

Principles of landscaping beneath trees

7.3 Landscaping beneath retained trees will be carried out by hand wherever possible, and will not involve the use of heavy machinery.

7.4 Soil levels will not be altered without prior approval from the appointed arboriculturist or planning authority.

7.5 Cultivation of areas beneath trees will be carried out manually only preparing the top 100mm of soil.

7.6 Where larger planting pits and greater depths are required these will be individually excavated retaining all roots greater than 25mm in diameter. Any retained roots will be wrapped in dry hessian until the pit is back filled.

APPENDIX 1: TREE SCHEDULE

Tree Survey Schedule - Key

Life Stage	Description	Key	Description	BS Category	Description	
NP	Newly planted	**Stem Ø (mm) at 1.5m**	Diameter of stem(s) in millimetres measured at 1.5m above ground level in accordance with BS 5837:2012.	**A**	Tree(s) of high quality with an estimated remaining life expectancy of at least 40 years.	
Y: Young	An establishing tree that could be easily transplanted.	**Stems**	Numbers of stems or M/S = Multi-Stemmed.	**B**	Tree(s) of moderate quality with an estimated remaining life expectancy of at least 20 years.	
SM: Semi Mature	An established tree still to reach its ultimate height and spread and with considerable growth potential.	**Height of (FSB)**	Height of first significant branch above ground level.	**C**	Tree(s) of low quality and value with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm.	
EM: Early Mature	A tree reaching its ultimate height and whose growth is slowing however it will still increase in stem diameter and crown spread.	**Crown Spread**	Crown spread at the four cardinal points, North, South, East and West.	**U**	Unsuitable for retention. Trees 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.	
M: Mature	A tree with limited potential for further significant increase in size although is likely to have a long safe useful life expectancy.	**Condition**	Assessment of the physiological and structural condition of the tree observed at the time of surveying.	**RPA radius (m)**		Radius of Root Protection Area (RPA) in metres based on relevant calculation in BS5837:2012 section 4.6.
OM: Over Mature	A senescent or moribund tree with a limited useful life expectancy.	**Est Remaining Contribution (Years)**	Estimated Remaining Contribution in Years (<10, 10+, 20+, 40+)	**RPA Area (m2)**		A layout design tool indicating the minimum area surrounding the tree that contains sufficient rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority. Size and shape based on calculations and constraints noted in BS5837:2012 section 4.6.
V: Veteran	A tree older than typical for its species and of significant ecological, cultural or aesthetic value.					

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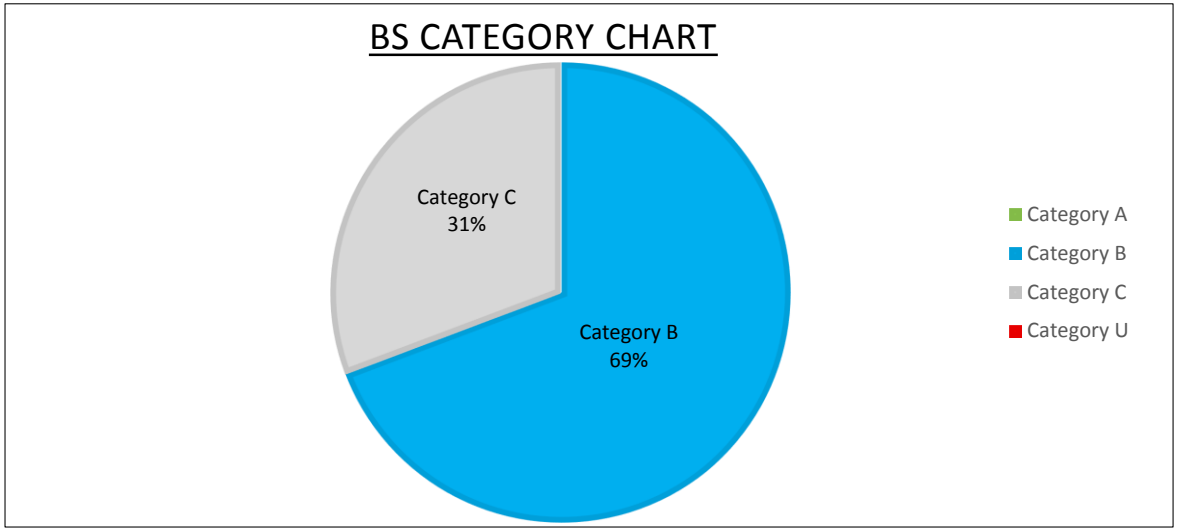
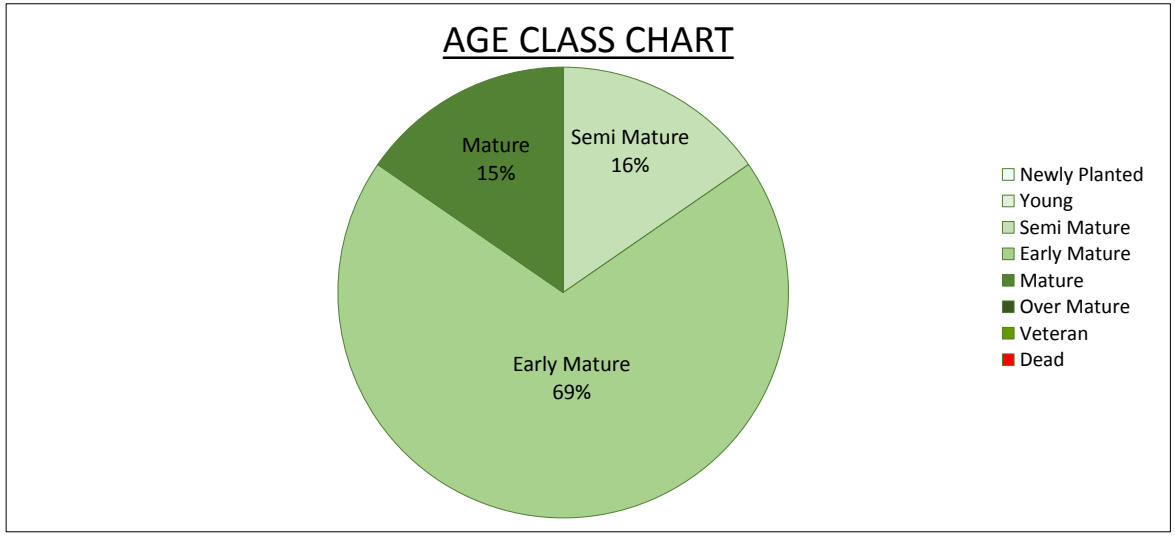
BS Category	Total
Category A	0
Category B	9
Category C	4
Category U	0
	13



Age Class	Total
Newly Planted	0
Young	0
Semi Mature	2
Early Mature	9
Mature	2
Over Mature	0
Veteran	0
Dead	0
	13



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Tree Survey Schedule

Site name: Harefield Grove, Rickmansworth Road, Harefield
Client: Comer Homes
Job Number: 20/027

Survey Date: 10 July 2020
Surveyor: Simon Smith

Tree No.	Tree Species	Life Stage	Stem Ø (mm) at 1.5m	Height (crown height) (m)	Height of (FSB)	Crown Spread				Condition	Comments	Tree Management Recommendations	Est Remaining Contribution (Years)	BS Cat	RPA Radius (m)	RPA area (m2)
						N	E	S	W							
T188	Abies nordmanniana (Caucasian Fir)	EM	550	19(11)	12	3.5	4	3.5	3.5	Good	Historic crown lift.		20+	B2	6.6	137
T189	Ilex aquifolium (Common Holly)	SM	406	10(2)	2.5	3.5	4.5	4	4.5	Good	Recent crown lift.		20+	B2	4.9	75
T190	Fagus sylvatica f. purpurea (Copper Beech)	SM	230	11(2.5)	3	3	4	3	3	Good	Recent crown lift.		20+	B2	2.8	24
T191	Fraxinus excelsior (Common Ash)	EM	380	15(5)		6	6	6	6	Good	Minor dead wood.		20+	B2	4.6	65
T192	Taxus baccata (Common Yew)	EM	370	7(2)	2	4	7	5.5	7	Good	Historic crown lift.		10+	C1	4.4	62
T193	Betula pendula (Silver Birch)	EM	376	8(3.5)	2.5W	4	3	4	5	Good			20+	B2	4.5	64
T194	Betula pendula (Silver Birch)	EM	410	9(2.5)	3	4	4	3	3	Poor	Sparse upper crown, chlorotic foliage.		10+	C1	4.9	76
T195	Betula pendula (Silver Birch)	EM	290	8(1.5)	2W	3	4	2	0	Fair	Poor shape & form.		10+	C1	3.5	38

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Tree No.	Tree Species	Life Stage	Stem Ø (mm) at 1.5m	Height (crown height) (m)	Height of (FSB)	Crown Spread				Condition	Comments	Tree Management Recommendations	Est Remaining Contribution (Years)	BS Cat	RPA Radius (m)	RPA area (m2)
						N	E	S	W							
T196	Aesculus hippocastanum (Horse Chestnut)	M	1110	15(2.5)	3SW	6	6	8	6	Good	Branch pruning wounds. Horse Chestnut Leaf Miner. Recent crown lift.		20+	B1	13.3	557
T197	Quercus robur (Common Oak)	EM	650	13(5)	6	4	4	5	6	Good	Historic crown lift.		20+	B2	7.8	191
T198	Fraxinus excelsior (Common Ash)	EM	438	15(2.5)	2.5E	5	5	5	4	Good	Multi-stemmed from base.		20+	B2	5.3	87
T199	Aesculus hippocastanum (Horse Chestnut)	M	830	13(1)	4E	7.5	8	6	6	Good	Horse Chestnut Leaf Miner.		20+	B2	10.0	312
T200	Quercus robur (Common Oak)	EM	640	12(4)	4	6	3	4	5	Fair	Potential bat roost features. Stem wounds. Stem cavity. Historic crown reduction. Sparse crown.		10+	C3	7.7	185

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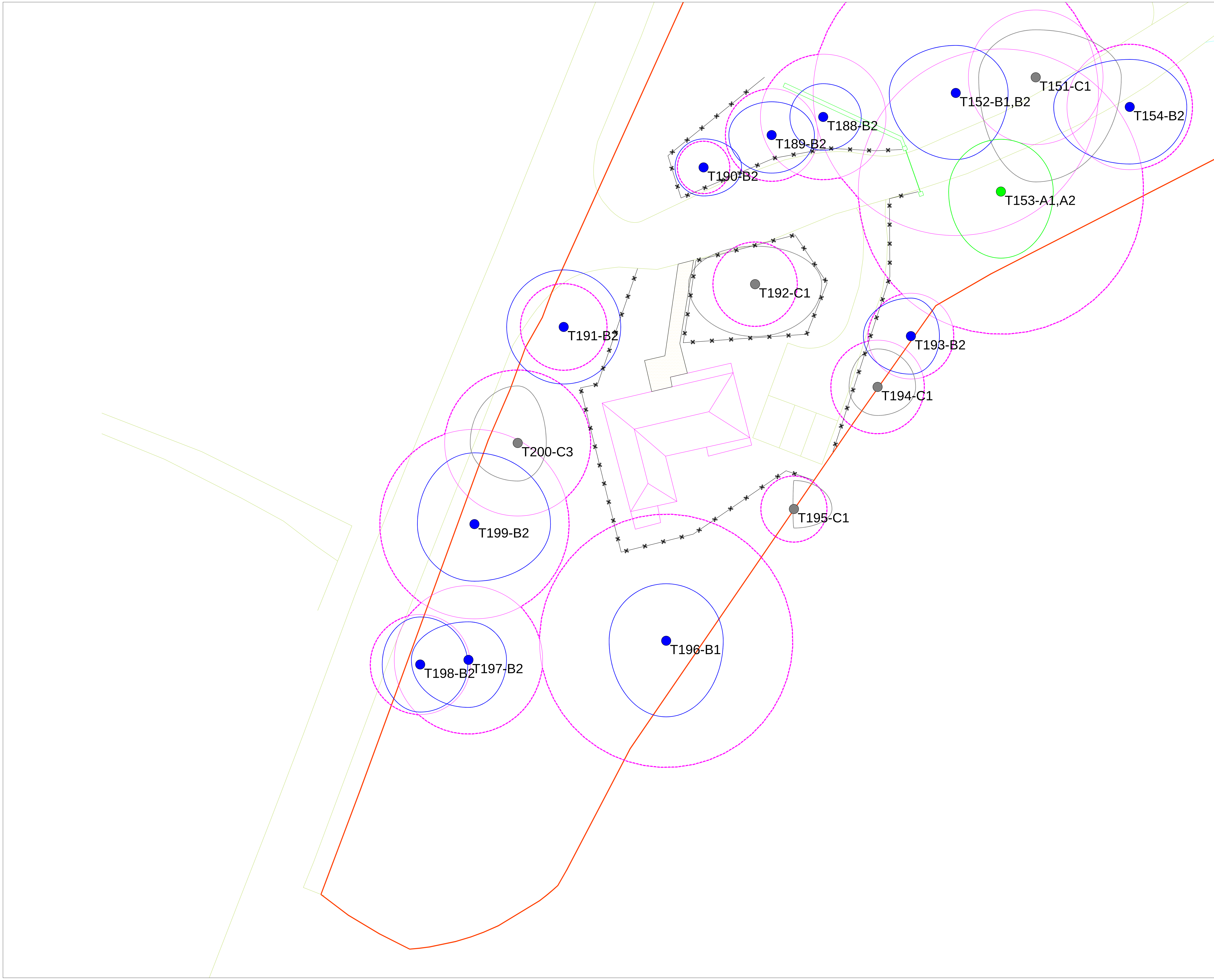
APPENDIX 2: JBA DRAWINGS



KEY

T1 G1 — Existing Tree or Group colour referenced in accordance with BS 5837:2012 as shown below

Existing hedge or group colour coded as above in accordance with BS 5837.

Green - Category A tree of high quality and value.

Blue - Category B tree of moderate quality and value.

Grey - Category C tree of low quality and value.

Red - Category U tree in irreversible decline or dead.

Blue - Cat B Groups/hedges of moderate quality and value.

Grey - Cat C Groups/hedges of low quality and value.

Root Protection Area as calculated in accordance with BS 5837:2012

Approximate line of protective fencing to be erected in accordance with BS 5837 and to be maintained throughout demolition and construction works.

REV.	DATE	INITIALS	DETAILS
.	.	.	.

CLIENT	DWG. TITLE
COMER HOMES	TREE PROTECTION PLAN

SITE
FORMER ENTRANCE LODGE, HAREFIELD GROVE, RICKMANSWORTH ROAD, HAREFIELD

PURPOSE OF ISSUE
-

DRG BY	CHECKED	AUTH'D	SCALE	DATE	DWG NO.	REV.
SAS	JBA	JBA	1:125 @A0	10.08.2020	JBA 20/027 TP04	-

GENERAL NOTES

-ALL DIMENSIONS IN MILLIMETRES
-DO NOT SCALE OFF THIS DRAWING
-ALL DIMENSIONS TO BE CHECKED ON SITE

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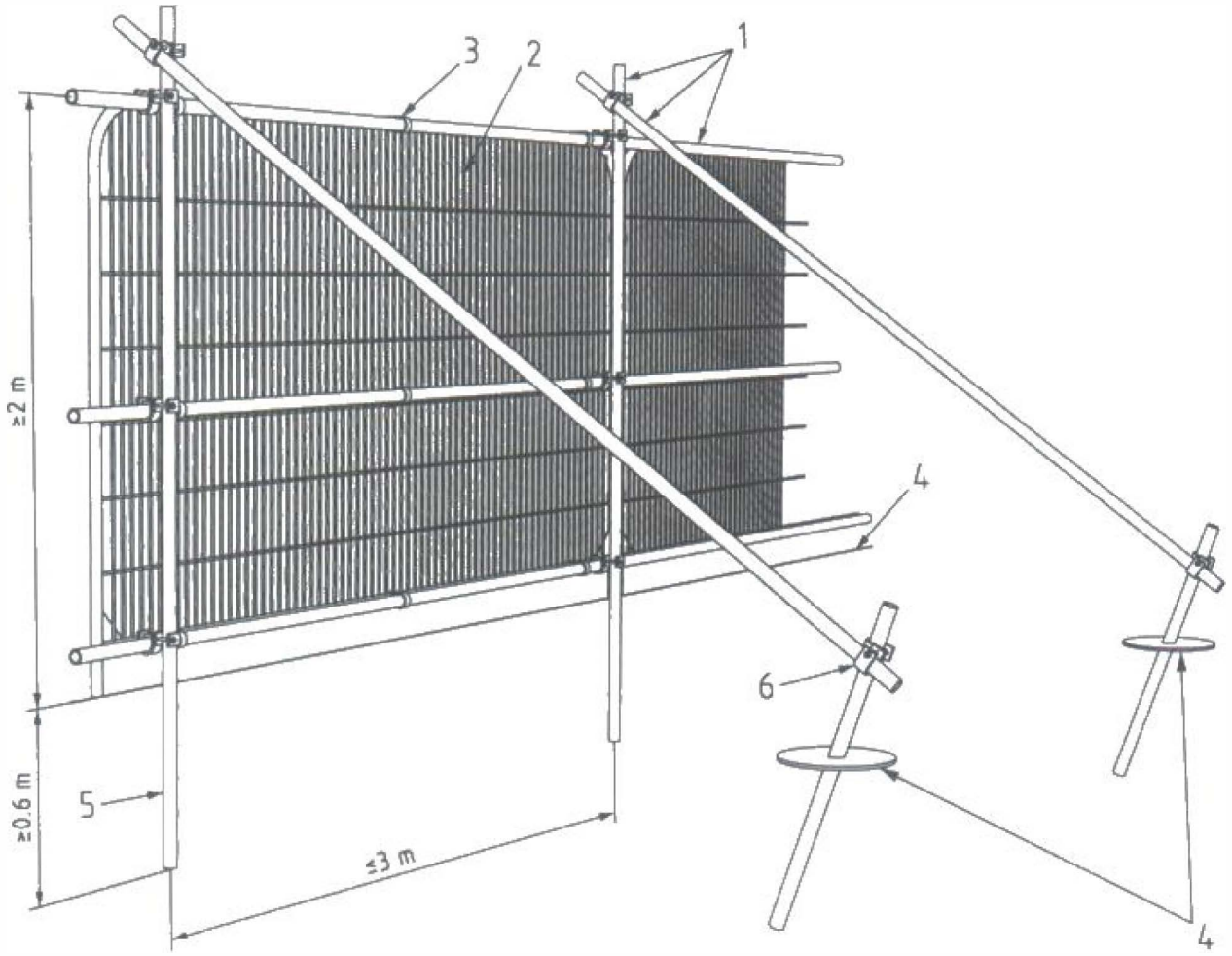
LANDSCAPE ARCHITECTURE o ARBORICULTURE o ECOLOGY

APPENDIX 3: PROTECTIVE FENCING SPECIFICATION

Figure 2 **Default specification for protective barrier**



Key

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

APPENDIX 4: PROTECTIVE FENCING SIGNAGE

TREE PROTECTION AREA
KEEP OUT!

NO WORKS TO BE CARRIED OUT IN THIS AREA WITHOUT PRIOR AGREEMENT OF THE LOCAL AUTHORITY OR APPOINTED ARBORICULTURAL CONSULTANT

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