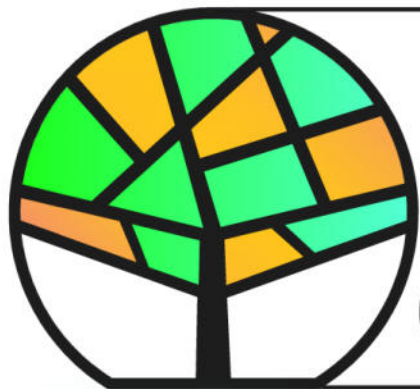




TGB TREE CONSULTING

BS 5837:2012 Tree Report

ARBORICULTURAL IMPACT ASSESSMENT

SITE ADDRESS:

Bismillah House, Brookers Hill, Shinfield, Reading, RG2 9BX

CLIENT:

Mrs Q Rukhsar

REF No:

TGB431.V1.1-AIA

SURVEY DATE:

14th of January 2026

PREPARED BY:

Tom Butterfield BSc(Hons), DipArb L4, TechArbor A
16th of January 2026 (*Amended 12/03/2026*)

REPORTS	INCLUDED
~INITIAL TREE SURVEY~	✗
~TREE SURVEY SCHEDULE~	✗
~TREE CONSTRAINTS PLAN~	✗
~ARBORICULTURAL IMPACT ASSESSMENT~	✓
~TREE SURVEY SCHEDULE + REQUIRED WORKS FOR THE PROPOSAL~	✓
~TREE PROTECTION PLAN~	✓
~ARBORICULTURAL METHOD STATEMENT~	✗

Issue No	Author	Issue Date	Additions/alterations	Notes
TGB431.V1.0 (Original)	TB	20/01/2026	NA	
TGB431.V1.1	TB	12/03/2026	Building moved 1.6m away from Beech T49.	Now resides outside of the RPA of T49.

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BIBLIOGRAPHY

- BS5837:2012. "Trees in relation to design, demolition and construction – Recommendations".
- Mattheck, C., Breloer, H. (2006). "The body language of trees a handbook for the failure analysis". London: TSO.
- www.mapapps.bgs.ac.uk/geologyofbritain/home.html

INTRODUCTION

1.0 TERMS AND ABBREVIATIONS

TPO	Tree Preservation Order	LPA	Local Planning Authority
CA	Conservation Area	TPF	Tree Protective Fencing
AIA	Arboricultural Impact Assessment	DBH	Diameter of the stem at breast height (1.5 meters)
AMS	Arboricultural Method Statement	TSS	Tree Survey Schedule
BS5837	British Standard 5837:2012 – Trees in Relation to Design, Demolition and Construction - Recommendations	CEZ	Construction Exclusion Zone
RPA	Root Protection Area	SUDS	Sustainable Urban Drainage System
RPR	Root Protection Radius	CCS	Cellular Confinement System
GP	Ground Protection	GP	Ground Protection

2.0 CONTACT DETAILS

Contact	Name	Company	Contact details	Issued
Client	Mrs Q Rukhsar	/		✓
Arboricultural Consultant	Mr Tom Butterfield	TGB Tree Consulting		
LPA Tree Officer	/	Wokingham Borough Council		
Architect	Mr Abdur Chowdhury	Abu Fahad Design & Build Ltd		✓

3.0 BRIEF AND PURPOSE

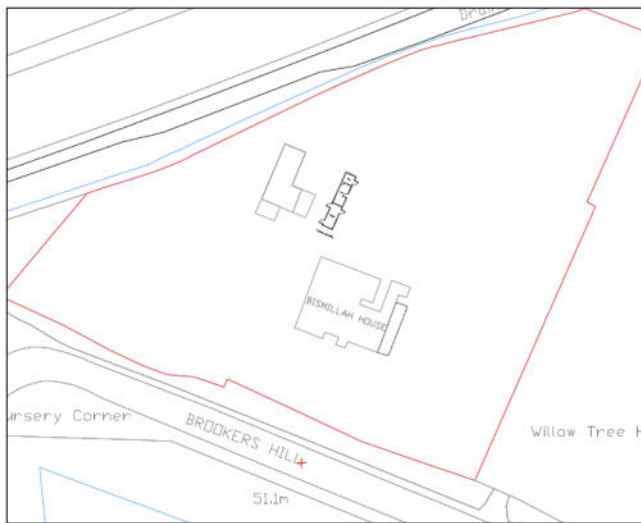
- 3.1 This Arboricultural report was commissioned by Mrs Q Rukhsar on the 12th of January 2026.
- 3.2 To offer recommendations for effective tree protection strategies throughout the development process.
- 3.3 To prepare an Arboricultural Impact Assessment and Tree Protection Plan for the proposal.
- 3.4 To supply the required Arboricultural information to meet the planning requirements of the LPA (Wokingham Borough Council).

4.0 BACKGROUND INFORMATION

- 4.1 This AIA is to be read in conjunction with the Arboricultural Report Tree Survey Ref: "TGB431.V1.0-TS(BismillahHouseRG29BX(January2026))".

5.0 PROPOSAL

- 5.1 The proposal is:
- 5.2 "Erection of a detached single-storey granny annexe with pitched tiled roof and associated fenestration following demolition of the existing outbuilding".



Existing Site Plan



Proposed Site Plan

6.0 PLANNING INFORMATION

- 6.1 The site falls under the jurisdiction of Wokingham Borough Council, the LPA for this area.
- 6.2 A planning application was submitted to Wokingham Borough Council and was registered on the 24th of September 2025, Reference No. 251578.
- 6.3 The current status of the application is "VALID", awaiting further information.
- 6.4 Following feedback from the local playing authority, the proposed annex has been moved 1.6 metres further from the beach tree T49.
- 6.5 This report aims to address the Arboricultural aspect of the planning application, so that by using appropriate Arboricultural methodologies, planning permission may be granted.

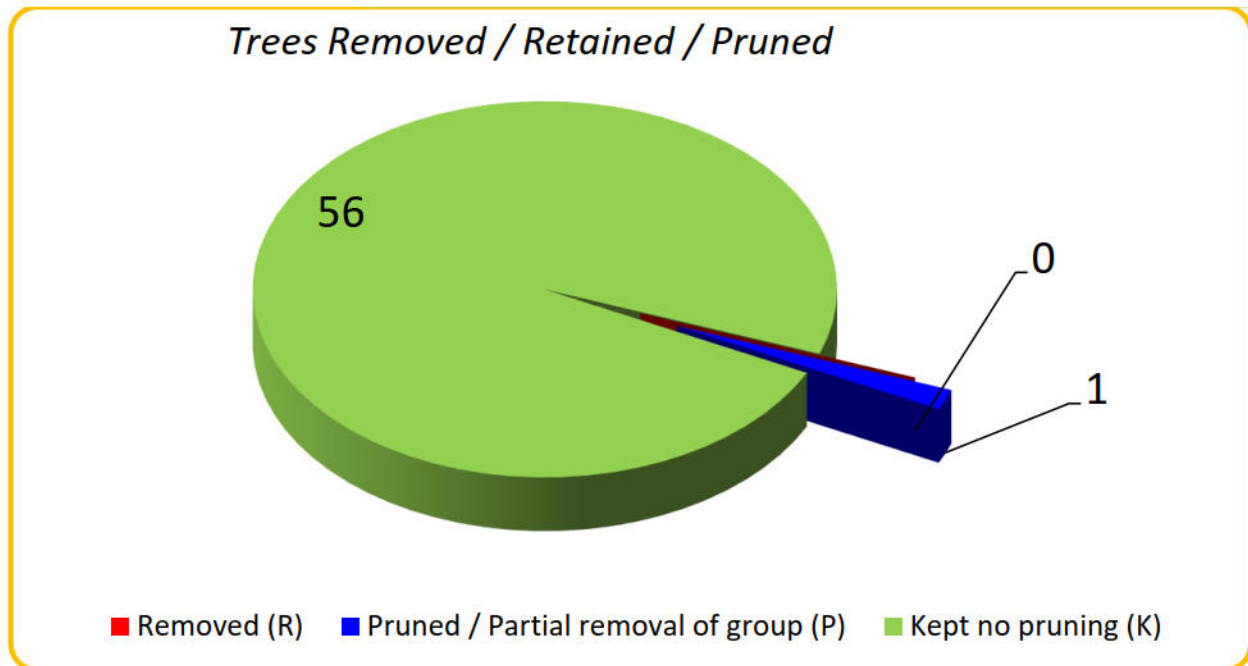
7.0 DOCUMENT SOURCE

Document	Source	Format	Name
<i>Site plan</i>	Abu Fahad Design & Build Ltd	PDF & DWG	<i>251578-Planning Plans-17072025</i>
<i>Proposed Plans</i>	Abu Fahad Design & Build Ltd	PDF & DWG	<i>251578-Planning Plans-17072025</i>

ARBORICULTURAL IMPACT ASSESSMENT

8.0 OVERVIEW

- 8.1 This section evaluates the potential impacts of the proposed works outlined in Section 5.0 on nearby trees. It addresses the Arboricultural considerations and pertinent mitigation measures.
- 8.2 The tree numbers and details below are provided solely for instances where works are designated to facilitate development, excluding cases where recommendations have been made based on Good Arboricultural Management principles and Health and Safety. Additionally, the preliminary recommendations outlined in the initial tree survey should be followed for trees intended to be retained.



9.0 TREE RETENTION (INCLUDES ANY TREE PRUNING)

- 9.1 The following trees are deemed suitable for retention and protection during the development.

Grade	A	B	C	U
Tree No.	/	T2, T5, T19, T23, T32, T33, T49, T50, T51, T52, T54, T57	NT1, T4, T6, T14, T15, T17, G22, T24, T25, T26, T28, T29, T30, T37, T38, T39, T40, T41, T46, T53, T58, T59, T60, T61, T62, T63, TSAP 12, TSAP 13, TSAP 14, TSAP 15	T3, T21, T27, T31, T34, T35, T36, T42, T43, T44, T45, T47, T48, T55, T56

*{} denotes partial removal of the group

10.0 TREE REMOVAL

- 10.1 No trees require removal to facilitate the development.

Tree Removal		
Tree Grade	Tree Number	Reason
A	/	/
B	/	/
C	/	/
U	/	/

11.0 TREE PRUNING WORKS

11.1 Tree pruning has been recommended to facilitate the development.

11.2 Trees/groups that require pruning include:

Tree Pruning		
Grade	Tree Number	Reason
A	/	
B	T49	(Facilitate the development) – Minor crown pruning of the low lateral branches on the Western side, in the direction of the proposed Annexe will provide sufficient clearance from the structure and allow for the safe installation of scaffolding during construction.
C	/	/
U	/	/

*{} denotes partial removal of the group



Figure 1 – Approximate level of crown lifting and lateral branch pruning

12.0 SITE CONSTRAINTS

12.1 Building materials and timber have been stacked around the base of the Beech (T49) and within its RPA.

12.2 These materials will cause ongoing compaction of the soil structure surrounding the Beech (T1).

12.3 It is recommended that all material within the RPA be removed to prevent further compaction.

12.4 Mulching within the RPA will help alleviate compaction damage over time.

13.0 ENCROACHMENT INTO RPAs

- 13.1 The table below summarises any encroachments/coverings into RPAs of retained trees and suggests appropriate techniques to minimise impacts.

CONSTRUCTION				
Tree No.	Type of Encroachment	Total area of RPA (m ²)	Encroachment into RPA (m ²)	Encroachment % of RPA
T49	Annexe Foundation Excavations.	215.4	0	0%
JUSTIFICATION Encroachments into the RPAs of T49 are required, but are unlikely to result in root severance of significant roots. Due to the lack of encroachment into the re-protection area of T49, no specialised building techniques are considered appropriate in this instance. The foundation may be installed using a traditional strip foundation. ACTION As a precautionary measure all excavations on the periphery of the root protection area of T49 (As illustrated on the tree protection plan) shall be dug by hand under Arboricultural supervision. The adjoining soil shall be protected from Lime leaching during the casting of the foundation. Acceptable				

14.0 ACCESS

- 14.1 Access to the development areas within the site is suitable by using the existing hard surfaces.
- 14.2 Access over soft ground within the RPAs of retained trees is not required.
- 14.3 Soft ground surrounding the development and within RPAs will be fenced off, and Ground Protection will be installed to prevent damage where pedestrian access is needed.

15.0 PROXIMITY AND SHADING

- 15.1 Section 5.3 of BS5837 addresses the issue of structures in proximity to trees and recommends that buildings are erected adequate distances away from trees to allow for future growth and development. Issues that are addressed include shading of buildings and open spaces, direct damage, pressure for removal, seasonal nuisance and concerns over safety.
- 15.2 The proximity between the development and the trees to be retained is in accordance with section 5.3 of BS5837, with the majority of the shadowing away from the proposed Annexe.
- 15.3 Pressures on surrounding trees should be of little consequence for the following reasons:
- Low-maintenance gutters (gutter guards) are to be specified close to retained trees, negating the need to remove leaves and needles from gutters and downpipes.
 - Minor tree pruning has been recommended to allow sufficient separation and clearance between the proposed development and the trees.
 - Future pruning works are unlikely to be greater than those for general maintenance purposes.

16.0 TREE PROTECTION

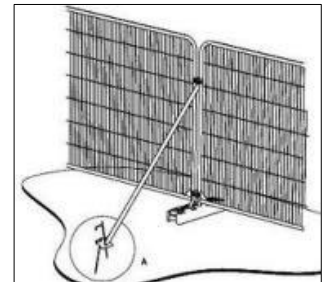
- 16.1 All trees earmarked for retention will be safeguarded in accordance with the guidelines set out in BS5837:2012. Tree protection measures will entail the installation of physical barriers or Ground Protection to shield the Root Protection Areas (RPAs) of retained trees.
- 16.2 All barriers will be erected prior to the commencement of development and maintained throughout the development process or up to a designated stage.

Tree Protection Fencing (Protective Barrier)

- 16.3 Tree Protection Fencing would be set out at the distances from the trees as noted in the Tree Survey Schedule under the RPA column or as illustrated in the Tree Protection Plan (Appendix 3).
- 16.4 The protected area would be designated as the 'Construction Exclusion Zone' (CEZ).
- 16.5 Only approved operations would be permitted to proceed within the CEZ.
- 16.6 The protective barrier to be used:

- **Secondary Specification:**

The barrier is to consist of 2m tall welded mesh panels (Heras fencing) secured on pinned rubber or concrete feet. The weldmesh panels shall be securely fixed and joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The distance between the fence couplers shall be at least 1m and shall be uniform throughout the fence. The panels shall be supported on the inner side by stabiliser struts, attached to a base plate secured with ground pins. (Appendix 4).



- 16.7 Weatherproof signs (Appendix 5) to be placed on the fencing at regular intervals of no less than every 8m.

Ground Protection

- 16.8 Where pedestrian or vehicular access is anticipated over an RPA, suitable Ground Protection will be installed, ensuring compaction of the roots and soil structure below is avoided (Appendix 4). Consists of scaffold boards or thick ply over a layer of compressible material like wood chips over a geotextile membrane.
- 16.9 Where there is an established, existing surface that will provide adequate protection for the roots and soil below, Ground Protection will not be required.

Soil Protection

- 16.10 Where it is anticipated that cement/concrete or any other contaminating material will come into direct contact with soil that resides within or adjacent to a RPA of a retained tree, a suitable membrane (like DPM) will be placed between to prevent contamination of the soil.

Soil Amelioration

- 16.11 To help offset the RPA encroachment into the Beech tree (T47) and help alleviate compaction within the RPA, especially to the North West of the stem, the rooting environment can be improved by the addition of well-rotted wood chip mulch to a maximum depth of 75mm and maintained for the duration of the build.
- 16.12 The mulch layer should be maintained in a moist condition.

Materials Storage

- 16.13 The storage and mixing of materials are to be located outside of the RPAs of retained trees.
- 16.14 No contaminating runoff is to be allowed to enter the RPAs of retained trees.
- 16.15 Contaminating waste will be disposed of in the foul drains using a sediment trap.

Services

- 16.16 New services are to be installed outside of the RPAs of retained trees.
- 16.17 Looking at the proposal, it is anticipated that no services are to be installed within the RPAs of retained trees.

17.0 MITIGATION & SUMMARY OF AIA

- 17.1 To facilitate the development:
- No trees are to be removed.
 - 1 x B-Grade tree requires minor pruning.
- 17.2 The Arboricultural implications of the proposed development are seen as acceptable as all trees can be retained.
- 17.3 A pre-commencement meeting is to be held before the project commences. Attendees to include Arboricultural Consultant, the client and the Tree Officer to, confirm and agree on the tree protection measures and any supervision that is required during the development.
- 17.4 All tree work, as recommended, is to be completed before the development begins.
- 17.5 Adequate Ground Protection and Tree Protection Fencing is to be in place before the development begins.
- 17.6 During the development, the Construction Exclusion Zones are to be acknowledged and strictly seen as sacrosanct. Access is to be restricted over all RPAs without adequate Ground Protection being installed beforehand.
- 17.7 Any operations within the Construction Exclusion Zone/RPAs are to be carried out under Arboricultural supervision.
- 17.8 The Annex Foundation resides outside of the route protection area of T49. It may proceed using a traditional strip foundation on the basis that the foundation. Cautionary measure, the foundation excavations on the periphery of the root protection area of T49 (As illustrated on the tree protection plan) will be dug by hand under Arboricultural supervision.
- 17.9 Where foundations are specified near trees, foundations will be designed in accordance with the National House Building Council's Standards Chapter 4.2 – Building near trees to resist tree-related damage.
- 17.10 All encroachments into the RPAs of retained trees are to be carried out by hand under Arboricultural supervision.
- 17.11 Any unforeseen encroachments into the RPAs of retained trees are to be carried out by hand under Arboricultural supervision.
- 17.12 Where cement is to be introduced into the ground within an RPA, a suitable membrane (plastic/DPM or similar) should be used to line the soil to prevent Lime leaching into the adjoining soil.
- 17.13 Soil Amelioration Works over RPAs of T49 (addition of mulch) are required.
- 17.14 All wastewater is to be disposed of responsibly into the sewage drain using a sediment trap to avoid blockages. No wastewater is to enter the RPAs of retained trees.
- 17.15 Landscaping - Ground within the RPAs shall not be mechanically scraped at any time. The clearance of any vegetation and ground within the RPAs shall be carefully carried out by hand. Vehicles shall not be allowed to track over the RPAs of retained trees.
- 17.16 New services are to be installed outside the RPAs of retained trees.
- 17.17 Low-maintenance gutters (gutter guards) are to be specified where the roof is close to retained trees.
- 17.18 All retained trees are to be protected in accordance with BS5837:2012.
- 17.19 The Arboricultural implications of the proposed development are deemed acceptable and may proceed with minimised risk to the retained trees, subject to full compliance with these tree protection recommendations.

APPENDICES

Appendix 1 – Tree Survey Schedule BS5837:2012

Site: Bismillah House, Brookers Hill, Shinfield, Reading, RG2 9BX
Client: Mrs Q Rukhsar
Survey Date: 14th of January 2026
Ref No: -AIA
LPA: Wokingham Borough Council
Weather: Overcast
Inspector: Tom Butterfield BSc(Hons), DipArb L4, TechArbor A

Tree Survey Schedule With Required Works



TGB Tree Consulting,
 Dunsfold,
 Surrey,
 GU83 4ND.
www.tgbtrees.co.uk
info@tgbtrees.co.uk

Prefix	ID	Species	No. Trees	No. Stem	HT (m)	N E S W	LB/Bear	LB/Ht(m)	DBH (mm)	Age	Landscape	RPR (m)	RPA (m ²)	Vitality	Structure	BS Cat	Life (yrs)	Notes and Observations	Required Works for Development	Reason
NT	1	Cupressocypariseyleylandii X (Leyland Cypress)	1	1	14	6 6 6 3	N	3	100	M	Med	1.2	4.5	G	F	C1 C2	10+	Off-site tree. Overhangs site boundary. Asymmetrical crown. Crown bias to the East.	/	/
T	2	Taxus baccata (English Yew)	1	1	5.5	5.5 3.5 2 4.5	N	2	380	SM	Med	4.6	65.3	G	G	B2 B3	20+	Suppressed. Multiple stems below 1.5m. Epicormic growth on stem. Asymmetrical crown. Crown bias to the North.	/	/
T	3	Ilex aquifolium (Common Holly)	1	1	2.5	0.5 0.5 0.5 0.5	N	1	85	SM	Low	1.0	3.3	D	D	U	<10	Dead standing tree.	/	/
T	4	Crataegus monogyna (Common Hawthorn)	1	1	4	0.5 1 2.5 1	S	1.5	100	SM	Low	1.2	4.5	F	F	C2	10+	Stunted. Suppressed. Ivy colonised tree. Slightly sparse crown. Asymmetrical crown. Crown bias to the South.	/	/
T	5	Quercus robur (Common Oak)	1	1	12	7 6 7 5	N	7	1200	M	High	14.4	651.0	F	P	B2 B3	20+	Selective scaffold pollarding down to large diameter wounds. The main stem trifurcates at 4.5m. The majority of the crown, especially in the North West has been previously removed. Previous tree work appears to have been completed. Ground-level change to the North West and hard surfacing installed in the past.	/	/
T	6	Acer pseudoplatanus (Sycamore)	1	6	8	2 2 4 2	W	1.5	250	EM	Med	7.3	169.3	F	F	C2	10+	Ivy colonised tree. Prohibiting full check. Multiple stems at ground level. Growing on the South side of the wooden fence, on the North side of the chain-link fence. Minor dieback.	/	/
T	SAP 12	Fagus sylvatica (Beech)	1	1	3	0.5 0.5 0.5 0.5	/	/	38	Y	Low	1.2	4.5	G	G	C1	10+	Newly planted tree. 12cm girth tree. In good condition. Stakes and ties are still present.	/	/
T	SAP 13	Acer platanoides (Norway Maple)	1	1	3.5	1 1 1 1	/	/	63	Y	Low	1.2	4.5	G	G	C1	10+	Newly planted tree. 20cm girth. In fair condition. Planted too deep.	/	/

Prefix	ID	Species	No. Trees	No. Stem	HT (m)	N E S W	LB/Bear	LB/Ht(m)	DBH (mm)	Age	Landscape	RPR (m)	RPA (m ²)	Vitality	Structure	BS Cat	Life (yrs)	Notes and Observations	Required Works for Development	Reason
T	14	Quercus robur (Common Oak)	1	1	9	3 3 3 3	S	8	1000	M	Med	12.0	452.5	P	P	C1 C2	10+	Tree has been pollarded in line with previous recommendations, leaving 3m scaffold framework. The majority of pollard points appear to exhibit minimal live growth. The majority of growth is present on the main stem and the Northern scaffold stem. Previous trees work completed. Ground-level change to the North and hard surfacing installed in the past. Monitor in the future.	/	/
T	SAP 14	Alnus glutinosa (Common Alder)	1	1	3.5	0.5 0.5 0.5 0.5	/	/	44	Y	Low	1.2	4.5	F	F	C1	10+	Newly planted tree. 14cm girth. In fair condition. Planted too deep. Minor bleeds on stem. Monitor	/	/
T	SAP 15	Platanus X hispanica (London Plane)	1	1	3.5	1 1 1 1 1	/	/	70	Y	Low	1.2	4.5	G	G	C1	10+	Newly planted tree. 22cm girth. In good condition. Planted too deep. Monitor	/	/
T	15	Sorbus torminalis (Wild Service)	1	1	3	0.5 0.5 0.5 0.5	E	1.5	50	Y	Low	0.6	1.1	F	F	C2	10+	Young tree. Suffered stem damage. Asymmetric crown. Bias to the East. Monitor.	/	/
T	17	Fagus sylvatica (Common Beech)	1	1	3	0.5 0.5 0.5 0.5	E	1.5	100	Y	Low	0.6	1.1	G	G	C2	10+	Young tree. Appears to be in good condition.	/	/
T	19	Quercus robur (Pedunculate Oak)	1	1	15	8 6 6 9	S	5	1200	M	High	14.4	651.5	G	F	B1 B2	20+	Ivy colonised tree. Slightly sparse crown. Dead wood removed. Growing on the South side of the panel fence. Stem base not readily accessible.	/	/
T	21	Fraxinus excelsior (Common Ash)	1	1	2	0 0 0 0 0	/	0	500	M	Low	6.0	113.1	D	D	U	<10	Dead pollard at 2m. Previous tree works completed.	/	/
G	22	Mixed (Mixed)	1	1	9	2.5 2.5 2.5 2.5	N	2	250	SM	Med	3.0	28.3	F	F	C2 C3	10+	A mixed group of trees include Sycamore and Elm. Ivy colonised trees. 8 x dead dying Elm & 1 dead Sycamore.	/	/
T	23	Quercus robur (Common Oak)	1	1	9	2.5 4 6 2	S	4	290	SM	Med	3.5	38.1	G	G	B2 B3	20+	Single stem. Asymmetrical crown. Crown bias to the South. Growing on the edge of the group.	/	/

Prefix	ID	Species	No. Trees	No. Stem	HT (m)	NESW	LB/Bear	LB/Ht(m)	DBH (mm)	Age	Landscape	RPR (m)	RPA (m ²)	Vitality	Structure	BS Cat	Life (yrs)	Notes and Observations	Required Works for Development	Reason
T	24	Fraxinus excelsior (Ash)	1	1	8	4.5 2 0.5 1.5	N	3	190	EM	Low	2.3	16.3	F	F	C1 C2	10+	Single stem. Suppressed. Small volume of medium size dead wood throughout the crown. Asymmetrical crown. Crown bias to the North. Leaning North. Growing up into the crown of adjacent Oak.	/	/
T	25	Fraxinus excelsior (Ash)	1	2	10	4 2 0.5 1.5	N	3	260,190	EM	Low	3.9	46.8	F	F	C1 C2	10+	Suppressed. Multiple stems below 1.5m. Small volume of medium size dead wood throughout the crown. Asymmetrical crown. Crown bias to the North West.	/	/
T	26	Fraxinus excelsior (Ash)	1	1	7	2 0 0.5 2	N	3	160	EM	Low	1.9	11.6	F	F	C1 C2	10+	Single stem. Crown bias to the North West.	/	/
T	27	Fraxinus excelsior (Ash)	1	1	10	2.5 0 0.5 2.5	N	3	200	EM	Low	2.4	18.1	F	P	U	<10	Single stem. Crown bias to the North West. Ash Dieback Disease - CLASS 2: 75%–51% of the crown remains.	/	/
T	28	Fraxinus excelsior (Ash)	1	1	10	4 2 0.5 2	N	3	300	EM	Low	3.6	40.7	F	F	C1 C2	10+	Single stem. Stem bifurcates above 1.5m. Crown bias to the North West.	/	/
T	29	Fraxinus excelsior (Ash)	1	1	10	2 2 2 3.5	N	3	330	EM	Low	4.0	49.3	F	F	C1 C2	10+	The smaller secondary stem on the East side has sporophores of Inonotus hispidus (Shaggy bracket) and is largely dead. The central stem previously lost its apical leader. Sheltered by surrounding companion trees.	/	/
T	30	Fraxinus excelsior (Ash)	1	1	8	1.5 1.5 1.5 1.5	N	3.5	150	SM	Low	1.8	10.2	F	F	C1 C2	10+	Single stem. Spindly. Stunted. Growing up into the crown of adjacent Monterey Cypress.	/	/
T	31	Fraxinus excelsior (Ash)	1	1	11	7 1 0.5 7	N	5	350	EM	Low	4.2	55.4	F	F	U	<10	Single stem. Crown bias to the North West. Leaning North West. Fungal sporophores of Inonotus hispidus (Shaggy bracket) growing on the stem at 6m on the North side.	/	/
T	32	Cupressus macrocarpa (Monterey Cypress)	1	1	17	6 7 7 7	N	5	790	M	High	9.5	282.4	F	F	B2 B3	20+	Large tree. A fractured, dead hanging branch on the West side at 7m. Upright branch on the North East side from 5m appears to have historically fractured from stem and rests in the adjacent tree to the North East.	/	/
T	33	Cupressus macrocarpa (Monterey Cypress)	1	1	17	6 7 4.5 7	W	5	810	M	High	9.7	296.9	F	F	B2 B3	20+	Moderate volume of medium size dead wood throughout the crown. Storm damage within the crown. Snapped hanging branches in the crown. Large tree. Slight stem lean to the North side. Timber stacked around the stem base, prohibiting a full check.	/	/

Prefix	ID	Species	No. Trees	No. Stem	HT (m)	N E S W	LB/Bear	LB/Ht(m)	DBH (mm)	Age	Landscape	RPR (m)	RPA (m ²)	Vitality	Structure	BS Cat	Life (yrs)	Notes and Observations	Required Works for Development	Reason
T	34	X Cupressocyparis leylandii (Leyland Cypress)	1	1	12	2 2 2 2	W	2	260	EM	Low	3.1	30.6	D	D	U	<10	Dead standing tree.	/	/
T	35	X Cupressocyparis leylandii (Leyland Cypress)	1	1	14	2 2 2 2	W	2	260	EM	Low	3.1	30.6	D	D	U	<10	Dead standing tree.	/	/
T	36	X Cupressocyparis leylandii (Leyland Cypress)	1	1	14	2.5 3.5 2 2	W	2	380	EM	Low	4.6	65.3	D	D	U	<10	Dead standing tree.	/	/
T	37	X Cupressocyparis leylandii (Leyland Cypress)	1	1	12	3.5 4 1 1	W	2	400	EM	Low	4.8	72.4	F	F	C2 C3	10+	Asymmetrical crown. Crown bias to the North. Will become exposed to new environmental conditions following the removal of adjacent companion trees.	/	/
T	38	X Cupressocyparis leylandii (Leyland Cypress)	1	1	14	2 7 3 2	E	4	430	M	Low	5.2	83.7	F	F	C1 C2	10+	Snapped hanging branches in the crown. Asymmetrical crown. Crown bias to the East. Slight browning of the crown	/	/
T	39	X Cupressocyparis leylandii (Leyland Cypress)	1	1	13	3 1.5 1.5 2	W	2	320	M	Low	3.8	46.3	P	F	C3	10+	Apical crown dieback and associated dead top of the crown. Asymmetrical crown. Crown bias to the North West. Slight browning of the crown.	/	/
T	40	X Cupressocyparis leylandii (Leyland Cypress)	1	1	14	3 3 3 3	S	7	370	EM	Med	4.4	61.9	P	F	C2 C3	10+	Single stem. Suppressed. Shares canopy with adjacent trees. Sheltered by surrounding companion trees. Slightly sparse crown. Monitor in the future.	/	/
T	41	X Cupressocyparis leylandii (Leyland Cypress)	1	1	14	2 7 3 2	E	4	440	M	Low	5.3	87.6	P	F	C2 C3	10+	Crown die-back. Slightly sparse crown. Snapped hanging branch in the crown. Asymmetrical crown. Crown bias to the East. Slight browning of the crown. Exposed sapwood wounds around at the stem base.	/	/

Prefix	ID	Species	No. Trees	No. Stem	HT (m)	N E S W	LB/Bear	LB/Ht(m)	DBH (mm)	Age	Landscape	RPR (m)	RPA (m ²)	Vitality	Structure	BS Cat	Life (yrs)	Notes and Observations	Required Works for Development	Reason
T	42	X Cupressocyparis leylandii (Leyland Cypress)	1	1	8	1.5 1.5 1.5 1.5	W	2	260	EM	Low	3.1	30.6	D	D	U	<10	Dead standing tree.	/	/
T	43	X Cupressocyparis leylandii (Leyland Cypress)	1	1	14	2 2 2 2	E	8	300	EM	Med	3.6	40.7	P	F	U	<10	Suppressed. Sheltered by surrounding companion trees. Apical crown dieback. Sparse crown. The remaining crown is beginning to brown. Likely to die in the future.	/	/
T	44	X Cupressocyparis leylandii (Leyland Cypress)	1	1	14	1.5 3 2.5 1.5	W	2	310	EM	Low	3.7	43.5	D	D	U	<10	Dead standing tree.	/	/
T	45	X Cupressocyparis leylandii (Leyland Cypress)	1	1	14	2.5 3 0 2	E	5	400	EM	Low	4.8	72.4	D	D	U	<10	Dead standing tree.	/	/
T	46	X Cupressocyparis leylandii (Leyland Cypress)	1	1	13	3 1.5 1.5 3	W	2	270	M	Low	3.2	33.0	P	F	C3	10+	Apical crown dieback and associated dead top of the crown. Asymmetrical crown. Crown bias to the North West. Slight browning of the crown. Will be exposed to new environmental conditions following the removal of all surrounding trees.	/	/
T	47	X Cupressocyparis leylandii (Leyland Cypress)	1	1	14	2.5 3 0.5 2	E	5	320	EM	Low	3.8	46.3	D	D	U	<10	Dead standing tree.	/	/
T	48	X Cupressocyparis leylandii (Leyland Cypress)	1	1	14	4 3 2 4	W	4	410	EM	Med	4.9	76.1	P	F	U	<10	Apical crown dieback. Crown die-back. Sparse crown. Asymmetrical crown. Crown bias to the West. Poor overall specimen. In terminal decline. Will become exposed to new environmental conditions following the removal of adjacent trees. in decline	/	/

Prefix	ID	Species	No. Trees	No. Stem	HT (m)	N E S W	LB/Bear	LB/Ht(m)	DBH (mm)	Age	Landscape	RPR (m)	RPA (m ²)	Vitality	Structure	BS Cat	Life (yrs)	Notes and Observations	Required Works for Development	Reason
T	49	Fagus sylvatica (Beech)	1	1	15	7.5 8 6.5 9.5	W	3	690	M	Med	8.3	215.4	F	F	B2 B3	20+	Small volume of medium size dead wood throughout the crown. Crown spreads the least in the South direction. Spreading crown to the East and West, and several slightly elongated branches. Large diameter lateral branch removal from the West side at 2.5m in the past. Buttresses on the South West side exhibiting bark peel and exposed sapwood below, possibly a result of historic physical damage. No further indications of disease or infection around the stem base.	Prune back the lower branch to the West direction by 1.5m to increase clearance from proposed Annex.	Facilitate the Development
T	50	Taxodium distichum (Swamp Cypress)	1	1	15	4.5 4.5 3.5 2.5	N	2.5	670	M	Med	8.0	203.1	G	F	B1 B2	20+	Stem bifurcates above 5m. Asymmetrical crown. Crown bias to the North. Slightly leaning North.	/	/
T	51	Taxodium distichum (Swamp Cypress)	1	1	15	5 5.5 5.5 5	S	0	840	M	Med	10.1	319.3	G	F	B1 B2	20+	Ivy colonised tree. The lowest lateral branch on South side at 3m has previously fractured and currently rests on the ground.	/	/
T	52	Pinus sylvestris (Scots Pine)	1	1	17	6 4 5 6	W	5	790	M	Med	9.5	282.4	G	F	B1 B2	20+	Significant volume of medium size dead wood throughout the crown and several pieces of major size dead wood in the crown. Ditch less than 1m to the East.	/	/
T	53	Pinus sylvestris (Scots Pine)	1	1	12	1 2 2 2	E	8	480	EM	Low	5.8	104.2	F	F	C1 C2	10+	Suppressed. Significant volume of medium size dead wood throughout the crown and several pieces of major size dead wood in the crown. Spoil stacked against the stem base. Ditch less than 1m to the East.	/	/
T	54	Pinus sylvestris (Scots Pine)	1	1	14	3 4.5 3 4	E	8	570	EM	Low	6.8	147.0	G	F	B2 B3	20+	Wounds on main stem associated with previous pruning (not significant). Small volume of medium size dead wood throughout the crown. Slightly leaning to the East. Ditch less than 1m to the East.	/	/
T	55	Pinus sylvestris (Scots Pine)	1	1	9	2 2 2 2	SW	4	400	EM	Low	4.8	72.4	D	D	U	<10	Dead standing tree. Slightly leaning East. Ditch less than 1m to the East.	/	/
T	56	Pinus sylvestris (Scots Pine)	1	1	14	8 4 2 6	W	5	660	M	Med	7.9	197.1	F	P	U	<10	Ditch less than 1m to the East. The main stem bifurcates at 7m. Lateral crown to the North appears to have previously fractured and is hung up in the adjacent tree to the North. Main fracture emanating from the stem bifurcation fracture at 12m. The majority of the crown in the North East appears compromised. The remaining crown retention of South West lateral branch is not viable. Recommend removal.	/	/

Prefix	ID	Species	No. Trees	No. Stem	HT (m)	N E S W	LB/Bear	LB/Ht(m)	DBH (mm)	Age	Landscape	RPR (m)	RPA (m ²)	Vitality	Structure	BS Cat	Life (yrs)	Notes and Observations	Required Works for Development	Reason
T	57	Aesculus hippocastanum (Horse Chestnut)	1	1	9	3.5 2 3.5 5.5	W	2	340	SM	Med	4.1	52.3	G	F	B2 B3	20+	Asymmetrical crown. Crown bias to the West.	/	/
T	58	Pinus sylvestris (Scots Pine)	1	1	14	7 5.5 2 4	E	5	570	M	Med	6.8	147.0	F	F	C1 C2	10+	Moderate volume of medium size dead wood throughout the crown. Slightly sparse crown. Asymmetrical crown. Crown bias to the North. Leaning North. Ditch less than 1m to the East.	/	/
T	59	Pinus sylvestris (Scots Pine)	1	1	14	5.5 4 3.5 3.5	E	8	570	M	Med	6.8	147.0	F	F	C1 C2	10+	Small volume of medium size dead wood throughout the crown. Slightly sparse crown. Ditch less than 1m to the East.	/	/
T	60	Fraxinus excelsior (Ash)	1	1	8	3 5.5 1.5 2	W	3	200	SM	Low	2.4	18.1	G	F	C1 C2	10+	Overhangs site boundary. Small tree. Crown bias to the North East. Ditch less than 1m to the West.	/	/
T	61	Pinus sylvestris (Scots Pine)	1	1	11	2 2 3.5 4	W	4	570	M	Med	6.8	147.0	F	P	C1 C2	10+	Small volume of medium size dead wood throughout the crown. Slightly sparse crown. Suffered a previous main stem fracture near the top of the crown. Ditch less than 1m to the East. Monitor in the future.	/	/
T	62	Pinus sylvestris (Scots Pine)	1	1	8	2 2 2 2	SW	6	310	SM	Low	3.7	43.5	F	P	C2 C3	10+	Park peel on the main stem. Small crown. Monitor in the future.	/	/
T	63	Prunus cerasifera (Cherry Plum)	1	1	6	3 2 3 4	W	2	160	SM	Low	1.9	11.6	G	F	C1 C2	10+	Suppressed. Multiple stems above 1.5m. Asymmetrical crown. Crown bias to the West. Leaning West.	/	/

Tree Survey Schedule Key and Notes

Prefix	T NT G NG W H	Tree Neighbouring Tree Group Neighbouring Group Woodland Hedge	ID	Refers to a unique identification number or tag number for the given tree or group. Corresponds to the Tree Constraints Plan and Tree Survey Schedule
No. Trees	Refers to the number of trees in a group.			
No. Stem	Refers to the number of stems per individual tree.			
Height	Describes the approximate height of the tree from ground level or buttress flare in meters.			
Crown Spread	Refers to the radius of the canopy in meters from the stem of the tree in the directions of North, East, South and West.			
LB/Bear	Lowest Branch Bearing: Refers to the directions of the lowest point of the canopy in meters.			
LB/Ht(m)	Lowest Branch Height: Refers to the ground clearance from the ground level to the height of the lowest point of the canopy in meters.			
DBH	Diameter at Breast Height. Stem diameter of the tree trunk measured in millimetres. If the tree is multi-stemmed, each diameter is recorded in the survey and a final DBH is calculated in accordance with BS5837.			
Age	Y SM EM M OM V	Young Semi-Mature Early Mature Mature Over Mature Veteran	Age class of the tree: Young - Usually less than 10 years old Semi-Mature - Significant future growth to be expected, both in height and crown spread (typically below 30% of life expectancy) Early Mature - Full height almost attained. Significant growth may be expected in terms of crown spread (typically 30-60% of life expectancy) Mature - Full height attained. Crown spread will increase but growth increments will be slight (typically 60% or more of life expectancy) Over Mature - A level of maturity whereby significant management may be required to keep the tree in a safe condition Veteran - A level of maturity whereby the crown has undergone natural or aided regression (veteranisation), significant management may be required to keep the tree in a safe condition. Typically contributes richly to ecological diversity.	
RPR	The radius of the Root Protection Radius is given in meters. The minimum area of ground requiring protection through development.			
RPA	The radius of the Root Protection Area is given in meters. The minimum area of ground requiring protection through development.			
Vitality	G F P D	Good Fair Poor Dead	Refers to the vitality of the tree: Having above-average vitality. Having average vitality. Having well below average vitality is struggling to survive and may be dying. Tree is dead.	
Structure	G F P D	Good Fair Poor Dead	Refers to the structure of the tree: Tree presents no significant structural defects Tree presents some structural defects, unlikely to lead to high-priority works. Tree presents significant structural defects that may lead to high-priority work. Tree is dead .	
Landscape	H M L	High Medium Low	Refers to the Landscape contribution value of the tree: Exceptional or very attractive specimen, observable by a significant number of people and in various locations. Attractive specimen, Medium potential to be observable by many people or vice versa. Unattractive specimen or largely hidden from view.	
BS CAT	The retention category refers to the BS5837:2012 (See Appendix 2) list, which considers both quality and value. "A"-High, "B"-Moderate, "C"-Low and "U"-Remove. List retention criteria. "1"- Arboricultural, "2"-Landscape and "3"- Cultural / Conservational.			
Life Exp	Life Expectancy: An estimated useful remaining contribution in years before the tree requires removal. Classed as (<10), (>10), (20+), (40+)			
Reasons	Refers to the reason a recommendation is made. Typically, to facilitate the development, access, good Arboricultural practice or Health and Safety.			

Appendix 2 –Cascade chart for tree quality assessment

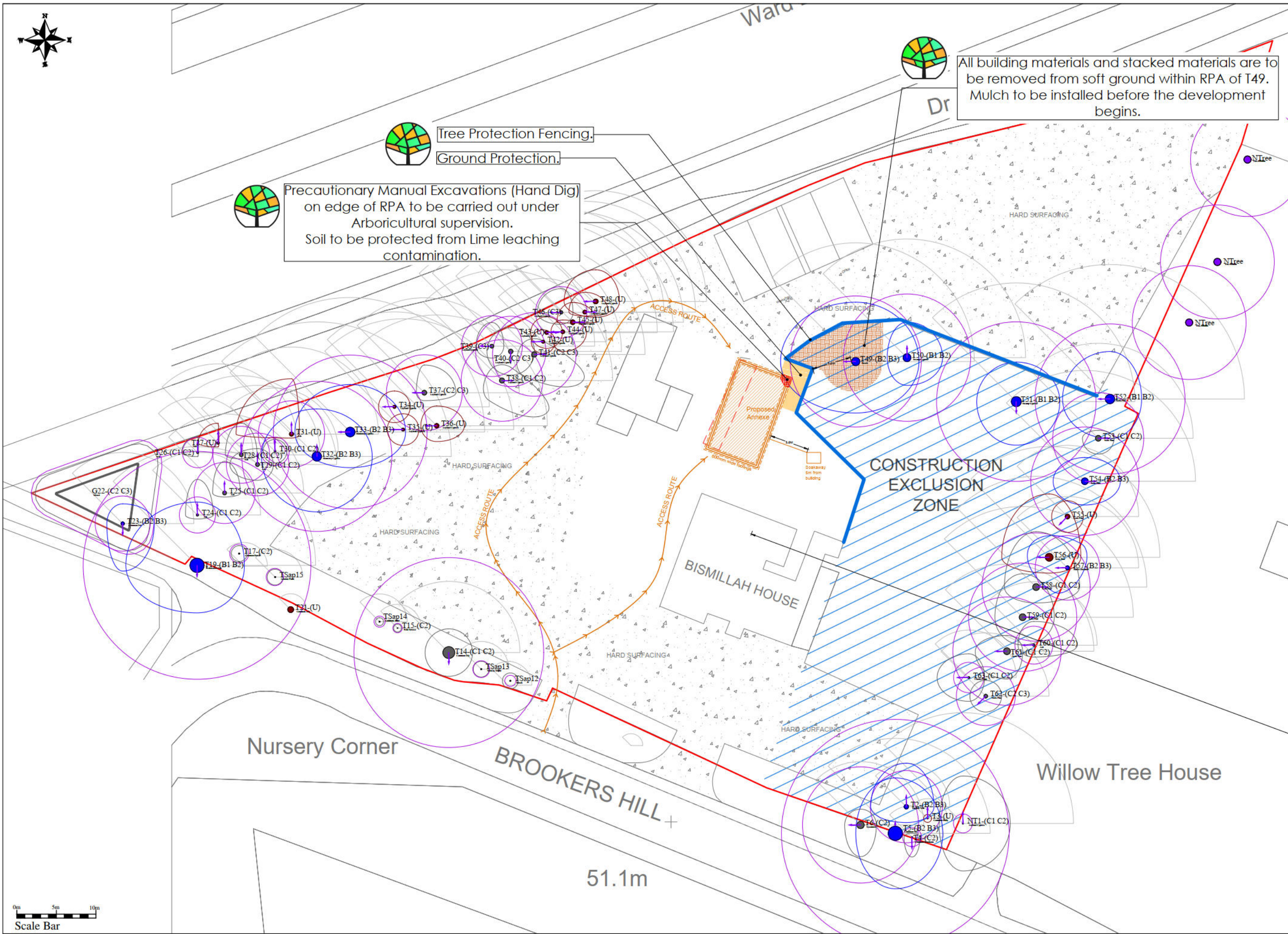
BS 5837:2012. TREES IN RELATION TO DESIGN, DEMOLITION AND CONSTRUCTION - RECOMMENDATIONS

~ Cascade Chart for Tree Quality Assessment ~

Trees to be considered for retention (see Note)				Identification on Plan
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years		- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees [e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning] - Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline - Trees infected with pathogens of significance to the health and/or safety of other trees nearby or very low-quality trees suppressing adjacent trees of better quality NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7		Dark Red RGB Code: 127-000-000
	1 Mainly Arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	Identification on Plan
Trees to be considered for retention				
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years		Trees that are particularly good examples of their species, especially if rare or unusual, or those that are essential components of groups or formal or semi-formal Arboricultural features [e.g. the dominant and/or principal trees within an avenue]	Trees, groups or woodlands of particular visual importance as Arboricultural and/or landscape features	Light green RGB Code: 000-255-000
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 a special quality necessary to merit the category A destination	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.	Mild Blue RGB Code: 000-000-255
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.	Grey RGB code: 091-091-019

Appendix 3 - Tree Protection Plan

TGB431.V1.1.A3.TPP(AIA)



Warning sign below to be attached to all Tree Protection fencing once erected.

TREE PROTECTION AREA

TREES LOCATED WITHIN THIS AREA ARE PROTECTED BY PLANNING CONDITIONS AND ARE SUBJECTS OF A TREE PROTECTION ORDER (TPO) ISSUED BY THE LOCAL PLANNING AUTHORITY.

CONTRAVENTION OF THE PROTECTION ORDER MAY BE A BREACH TO CRIMINAL PROSECUTION.

THE FOLLOWING MUST BE OBSERVED BY ALL PERSONS:-

- THE PROTECTIVE FENCING MUST NOT BE REMOVED
- NO PERSON SHALL ENTER THE PROTECTED AREA
- NO MACHINE OR PLANT SHALL ENTER THE PROTECTED AREA
- NO MATERIALS SHALL BE STORED IN THE PROTECTED AREA
- NO SPILL SHALL BE DEPOSITED IN THE PROTECTED AREA
- NO EXCAVATION SHALL OCCUR IN THE PROTECTED AREA

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY.

KEEP OUT!

[illegible][illegible]

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Tom Butterfield
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Appendix 4 – Tree Protection

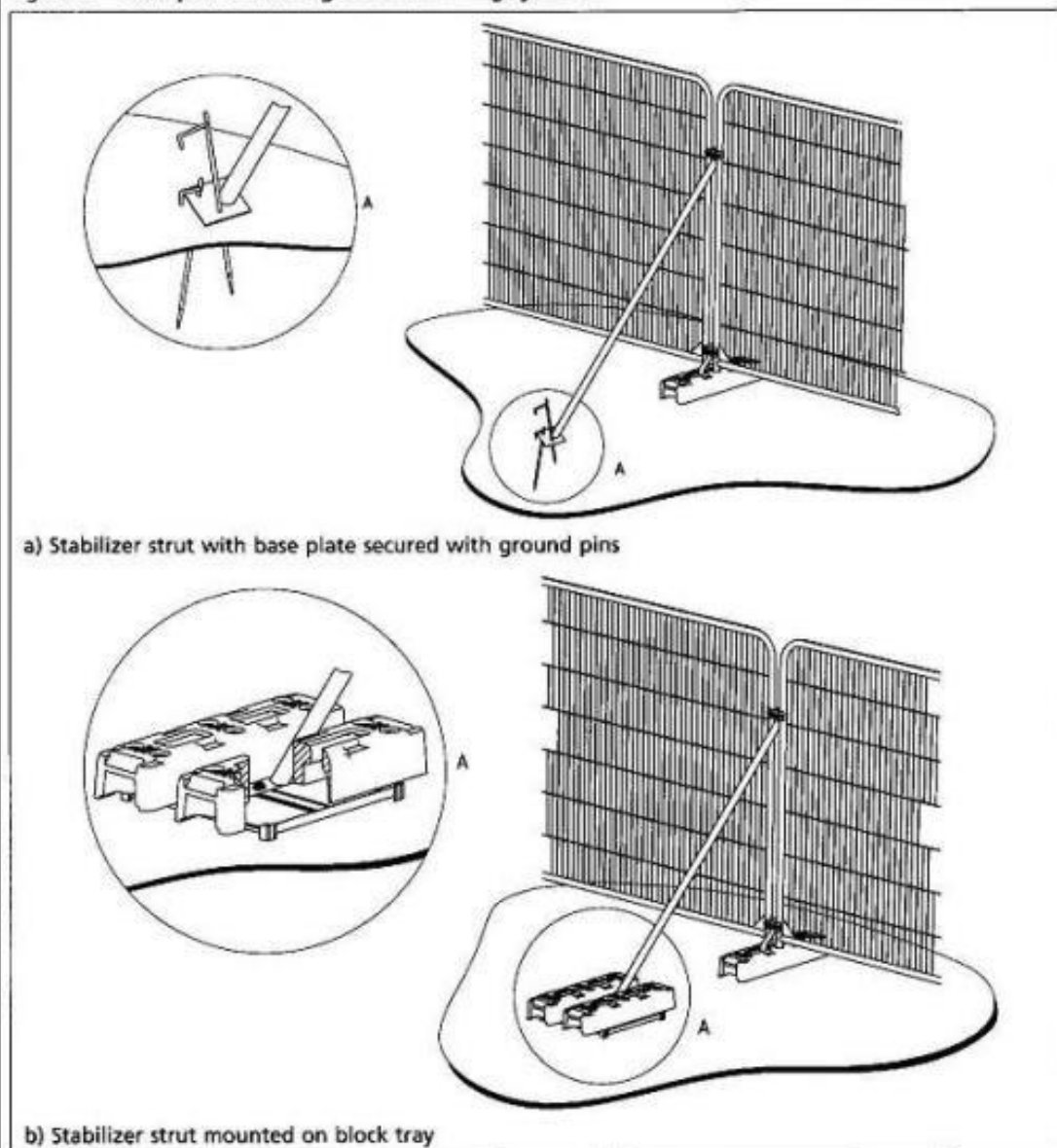
Tree Protection Fencing

SECONDARY SPECIFICATION - HERAS FENCING ON PINNED BASEPLATE

BRITISH STANDARD

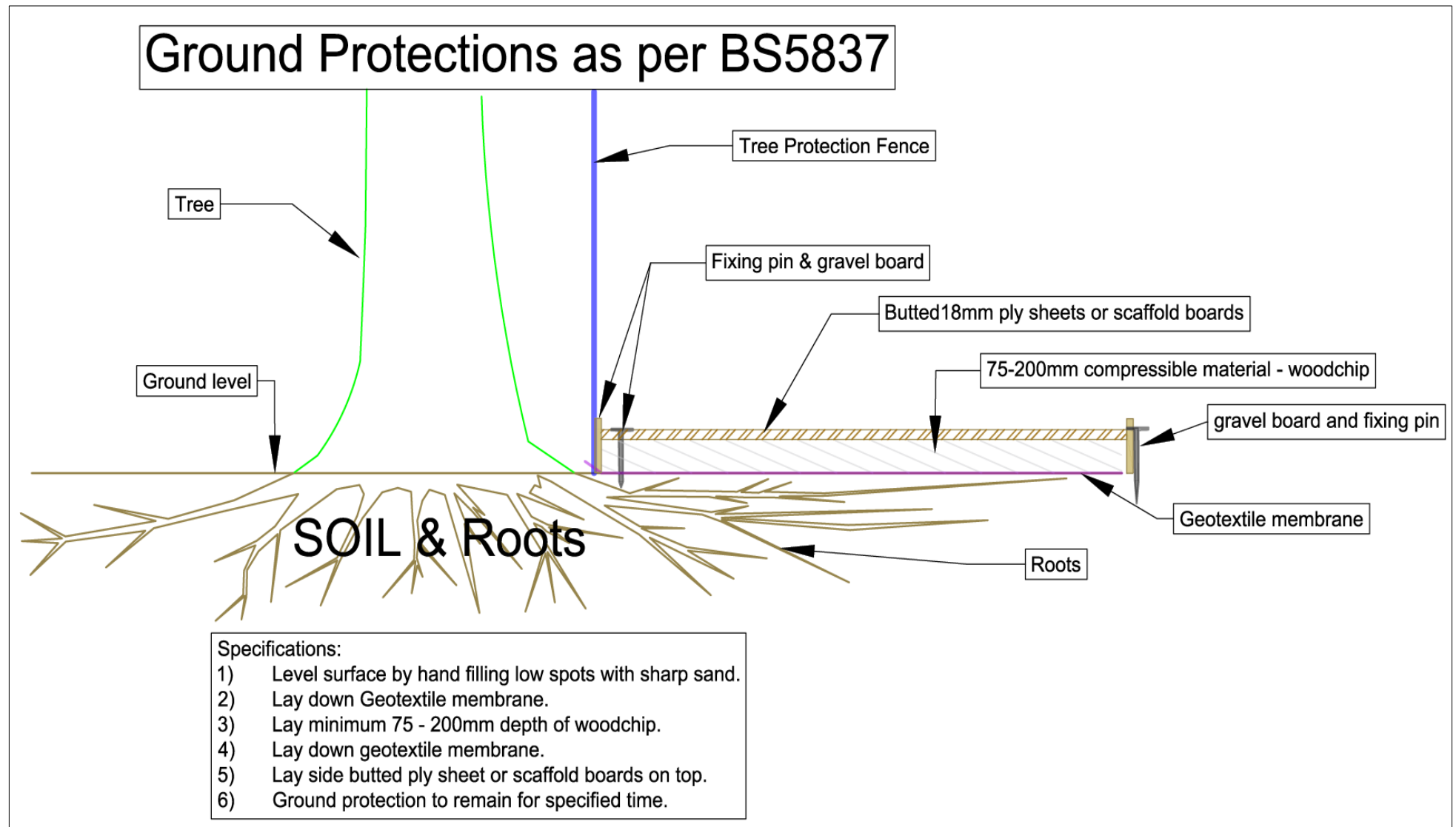
BS 5837:2012

Figure 3 Examples of above-ground stabilizing systems



6.2.3 Ground protection during demolition and construction

6.2.3.1 Where construction working space or temporary construction access is justified within the RPA, this should be facilitated by a set-back in the alignment of the tree protection barrier. In such areas, suitable existing hard surfacing that is not proposed for re-use as part of the finished design should be retained to act as temporary ground protection during construction, rather than being removed during demolition. The suitability of such surfacing for this purpose should be evaluated by the project arboriculturist and an engineer as appropriate.

Ground Protection – BS5837 Specification

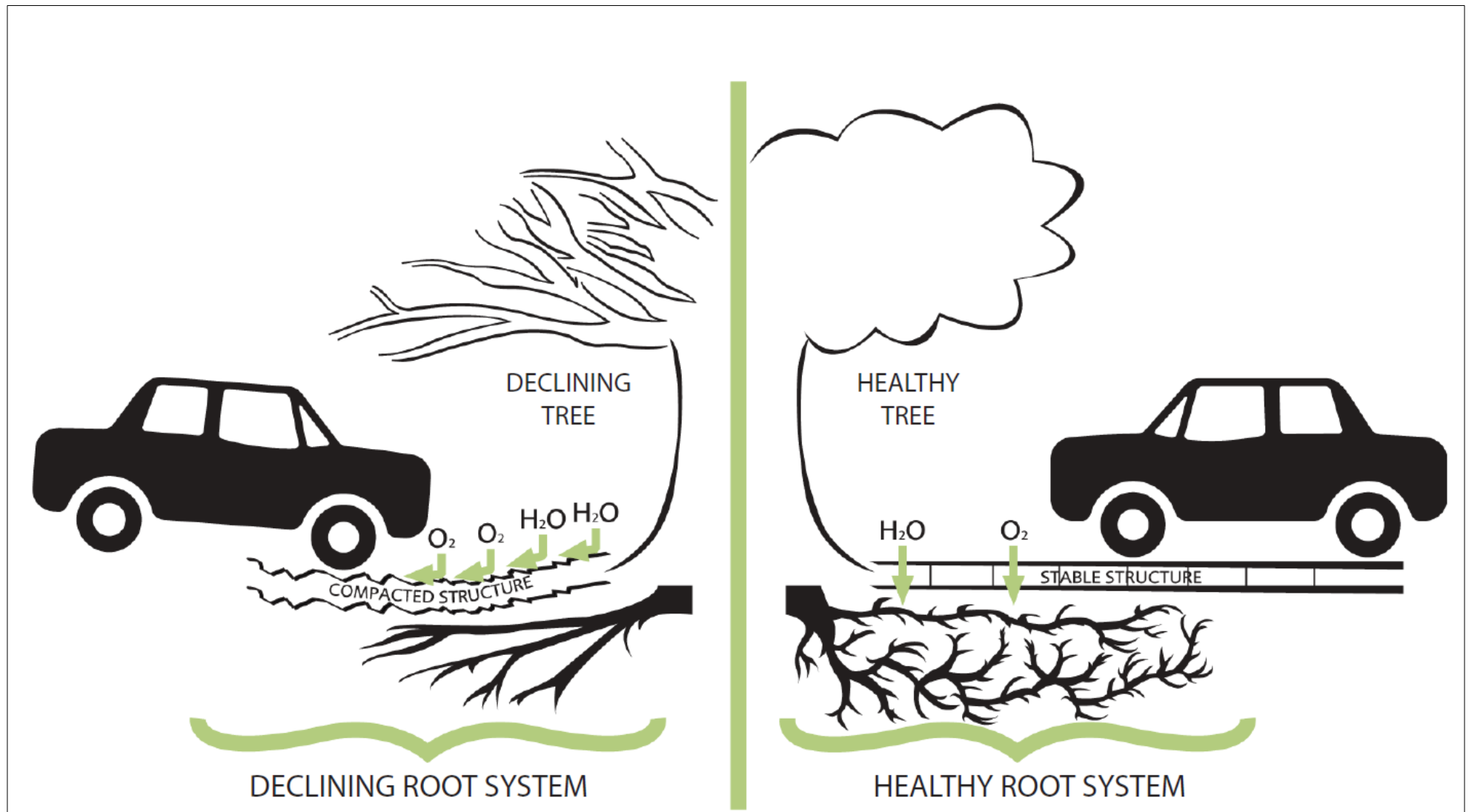


Figure 2 - Illustration showing the effects of not using Ground Protection against using Ground Protection

Appendix 5 - Exclusion sign for CEZ

TREE PROTECTION AREA

TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND ARE SUBJECTS OF
A TREE PRESERVATION ORDER
(TOWN & COUNTRY PLANNING ACT 1990)

CONTRAVENTION OF TREE PRESERVATION ORDERS MAY LEAD TO CRIMINAL PROSECUTION

THE FOLLOWING **MUST BE OBSERVED BY ALL PERSONS:-**

- THE PROTECTIVE FENCING MUST NOT BE REMOVED
- NO PERSON SHALL ENTER THE PROTECTED AREA
- NO MACHINE OR PLANT SHALL ENTER THE PROTECTED AREA
- NO MATERIALS SHALL BE STORED IN THE PROTECTED AREA
- NO SPOIL SHALL BE DEPOSITED IN THE PROTECTED AREA
- NO EXCAVATION SHALL OCCUR IN THE PROTECTED AREA

**ANY INCURSION INTO THE PROTECTED AREA MUST BE
WITH THE WRITTEN PERMISSON OF THE LOCAL PLANNING AUTHORITY**

KEEP OUT!



**PROTECTIVE FENCING. THIS
FENCING MUST BE
MAINTAINED IN ACCORDANCE
WITH THE APPROVED PLANS
AND DRAWINGS FOR THIS
DEVELOPMENT.**



**TREE PROTECTION AREA
KEEP OUT !**

**(TOWN & COUNTRY PLANNING ACT 1990)
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY
PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A
TREE PRESERVATION ORDER.
CONTRAVENTION OF A TREE PRESERVATION ORDER MAY
LEAD TO CRIMINAL PROSECUTION**

**ANY INCURSION INTO THE PROTECTED AREA MUST BE
WITH THE WRITTEN PERMISSION OF THE LOCAL
PLANNING AUTHORITY**