



BS5837 2012

Tree survey & report

**36 Summerhill Road,
Complain,
Waterlooville
PO8 8XE**

Prepared by Chris Anderson -TecArborA

25th October 2024

Contents

Section	Title	Page Number
0.0	Summary / Details / References	3
1.0	Introduction	4
2.0	Documents provided	4
3.0	Survey format	5
4.0	Grading categories	5
5.0	Legislation	6
6.0	Development proposal	6
7.0	Site description	6-7
8.0	Tree survey	7
9.0	Tree appraisal	7

Arboricultural Impact Assessment

10.0	Below ground constraints – Root protection area (RPA)	10
11.0	Above ground constraints	10
12.0	Comment	11
13.0	Conclusion	11-12

Arboricultural Method Statement

14.0	Sequence of events	13
15.0	Protective barriers & construction exclusion zone	13-14
16.0	Ground protection	14
17.0	Foundation construction	14
18.0	Infrastructure requirements	15
19.0	Additional precautions	15
20.0	Supervision & monitoring	15

Appendices:

1- Tree survey schedule. 2 - Definition of terms. 3 - BS 5837 grading categories. 4 - Tree constraints and development proposal. 5 – Landscaping plan. 6 - Tree protection plan. 7 - Protective barriers. 8 - Site visit /arboricultural supervision record/Monitoring.

SUMMARY

- The quality of 7 trees within the influence of a development proposal was assessed:
- An Arboricultural impact assessment of the development proposal was prepared;
- The proposal is for a detached, 4-bedroom, two-story dwelling.
- Implementation of the development proposal will require the removal of T2, Western red cedar.
- Precautionary measures will need to be implemented to safeguard the retained trees during the development.

Details

- **Date of survey** - 23rd October 2024
- **Present at the survey** - Chris Anderson- TecArborA
- **Date of report** - 25th October 2024

Contact Details

<u>Local Planning Authority</u>	Havant Borough Council	Tel -02392 446019 Email - planning.development@havant.gov.uk
<u>Architects</u>	HD Architects	Tel- 01243 370715 Email - mail@hdarchitects.co.uk
<u>Arboricultural Consultants</u>	Anson Arboriculture	Tel – 07557878872 Email- ansonarb@otmail.com

References

Roberts, J. Jackson, N. Smith, M. (2006). *Tree Roots in the Built Environment*. The Stationery Office
BSI British Standards (2012) *BS 5837:2012 Trees in relation to demolition and construction – Recommendations, Fourth (Present) Edition*. BSI

1.0 Introduction

1.1 I have received instruction from Mr Karl Jenkinson to advise on Arboricultural matters in relation to the proposed development on the east side of **36 Summerhill Road, Cowplain.**

1.2 The purpose of the instruction was to:

- Assess the quality of any trees that could be affected by the proposed development.
- Prepare an Arboricultural impact assessment evaluating the effects of the development proposal.
- Prepare a method statement and tree protection plan.

1.3 The survey was conducted, and the report was prepared following the guidelines outlined in BS 5837:2012, titled "Trees in Relation to Design, Demolition, and Construction – Recommendations," and following established Arboricultural practices relevant at the time of this report.

1.4 Contents of the report are exclusively for the use of the client; liability does not extend to any third party without written consent from Anson Arboriculture.

2.0 Documents Provided

2.1 Drawings provided by HP Architects

	The proposed construction area is marked with a red line on the Tree constraints plan, refer to the map Key.	1.500
--	--	-------

3.0 Survey Format

- 3.1 The survey included trees that could potentially be affected by the development proposal, specifically those with a stem diameter greater than 75 mm measured at 1.5 m above ground and within 20 meters. The trees were inspected from the ground, and no specialised decay detection methods were used. Assessments were conducted from within the site or from public areas only.
- 3.2 The tree IDs in this report may differ from previous surveys; no trees were individually tagged.
- 3.3 Data was recorded on a handheld computer. The individual trees were plotted via GPS, and their positions were marked on the 1:500 tree constraints plan. The tree categories are on separate and overview maps (Appendix 4).
- 3.4 A detailed tree survey sheet is shown in Appendix 1, with an explanation of the terms and categories covered in Appendix 2.
- 3.5 The survey effectively gathered the necessary data to assess the feasibility of the proposed development. While it did not conduct a detailed evaluation of tree hazards or risks, it is important to note that, unless specifically indicated, there is no guarantee, expressed or implied, regarding the safety or long-term suitability of the trees for retention. All surveyed trees are in normal condition.

4.0 Grading Categories

- 4.1 The quality of the surveyed trees was evaluated and categorised according to the criteria outlined in Table 1 of BS 5837:2012, as detailed in Appendix 3.
- 4.2 The following is a breakdown of the number of trees in each BS category.

Category U	0 tree
Category A	0 trees
Category B	5 trees
Category C	2 trees

5.0 Legislation

- 5.1 **Tree Preservation Orders & Conservation Areas**—Consultation with Havant Borough Council confirmed that the application site is not within a designated conservation area. However, all trees on site are protected by a tree preservation order. TPO number 2011 covers all trees on the development site and surrounding boundaries. T1, T2, and T3 are within the development proposal's influence.
- 5.2 **Wildlife legislation** – under Part 1 of the Wildlife and Countryside Act (1981), with only a few exceptions, it is an offence to intentionally damage or destroy the nest of any wild bird while the nest is in use or being built. Bat species are protected under Section 39 of the 1994 Conservation (Natural Habitats, etc.) Regulations (as amended), the 1981 Wildlife and Countryside Act (as amended) and the 2000 Countryside and Rights of Way Act. It is illegal to damage or destroy any bat roost, whether occupied or not, or disturb or harm a bat. Further specialist investigation may be required before undertaking any recommended works.

6.0 Development Proposal

- 6.1 The proposal is to construct a detached two-story, four-bedroom dwelling with off-road parking.

7.0 Site Description

- 7.1 The proposed site is in a suburban setting with broadly level grounds of approximately 450 m² (**Fig.1**). Access to the property is from a drop kerb, crossing a public footpath from Summerhill Road (**Fig.1A**).



Fig.1



Fig.1A

- 7.2 The British Geological Survey clearly identifies the site geology as Lambeth group clay, silt, and sand sedimentary bedrock. The National Soils Resources Institute also describes the superficial geology as slowly permeable, seasonally wet, slightly acidic, yet base-rich loamy and clayey soil. No detailed soil structure, composition, or pH analysis has been performed. It is essential not to overlook these factors when considering design.
- 7.3 The presence of highly shrinkable clay soil, in conjunction with the water demands of certain trees, must be taken into account in foundation design. For comprehensive guidance on building near trees, refer to NHBC Standards Chapter 4.2.

8.0 Tree Survey

- 8.1 Trees, T1, T2 and T3, are in the front and rear garden within the construction footprint of 36 Summerhill Road, while T4, T5, T6 and T7 give good Public and private amenity value (Appendix 4).
- 8.2 The trees recorded are situated at 36 and 38 Summerhill Road. At No. 38, I confidently identified mature oaks thriving in the garden. No. 36 showcases a short section of hedge that includes plums, willow, hawthorn, and guelder rose. The northern end of the plot is home to bamboo, sumac, cordyline, magnolia, and viburnum, all flourishing. Closer to the road, you'll find lilac, holly, yew, and dogwood, completing a diverse and vibrant landscape.

9.0 Tree Appraisal

- 9.1 Details and comments of individual trees and groups are listed in the appended BS 5837 survey schedule detailed in Appendix 1 below.

Client: Mr Karl Jenkinson
 Project: 36 Summerhill Road, Cowplain PO8 8XE
 Survey Date: 23/10/2024
 Surveyor: Chris Anderson; TechArborA

Appendix 1

Drivetts cottage
 Purbrook Heath Road
 Purbrook
 PO75RZ
 Phone: 07557878872

Tree and Tag No Species		Hght (m)	Stems		Crown		Age	RP A (m ²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
			No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
T1														
Horse Chestnut <i>Aesculus hippocastanum</i>		13	2	488 (Eq)	N	3	3	M	A: 107.9	Good	C: Good			B.1
					E	4.5	3		R: 5.86		S: Ivy	Twin-stemmed tree: the third stem to the southwest has been removed and is producing regrowth from this area; this tree is close to the boundary wall.	20 to 40 yrs	
					S	3.5	2.5				B: Fair			
					W	3	3							
T2														
Western Red Cedar <i>Thuja plicata</i>		13.5	2	557 (Eq)	N	2	0.5	M	A: 140.4	Fair	C: Good			B.1
					E	4.5	0.5		R: 6.68		S: Ivy	Ivy-covered stem, the tree is in fair condition, with the crown becoming sparse.		
					S	3	1				B: Fair			
					W	2.5	0.5							
T3														
English Oak <i>Quercus robur</i>		9.5	2	461 (Eq)	N	2	4	M	A: 96	Good	C: Fair			B.1
					E	3.5	3		R: 5.52		S: Good	This tree has been historically reduced to 8-10 meters, producing good Regrowth, dominant dead, wrapped stem requires removal	20-40 yrs	
					S	2	2				B: Fair			
					W	2	3							
T4														
Apple <i>Malus domestica</i>		7.2	2	283 (Eq)	N	2	4	M	A: 36.3	Good	C: Good			B.1
					E	3.5	3		R: 3.39		S: Ivy		20 to 40 yrs	
					S	2	1				B: Fair			
					W	1.5	1							
Age Classifications:		N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:		C S B	Crown Stem Basal area	Stems:		Ø (Eq)	Diameter Equivalent stem diameter using BS5837:2012 definition	
										ERC:			Estimated Remaining Contribution	

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations		Cat ERC
		No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment		
T5												
Plum <i>Prunus domestica</i>	5.5	1	110	N E S W	2 2.5 1 2	1.5 1 1.5 1	M A: 5.5 R: 1.32	Good	C: Good S: Fair B: Fair			C.1 20 to 40 yrs
T6											Estimated Measurements	
English Oak <i>Quercus robur</i>	17	1	550	N E S W	4 3.5 6 6	5 5 4.5 5	M A: 136.9 R: 6.6	Good	C: Fair S: Good B:	Off-site tree with historic reduction		B.1 >40 yrs
T7											Estimated Measurements	
English Oak <i>Quercus robur</i>	13	1	500	N E S W	4 4 3 3	5 5 4.5 4	M A: 113.1 R: 6	Good	C: Fair S: Good B:	Off-site tree with historic reduction.		B.1 >40 yrs
Age Classifications:	N Y SM	Newly planted Young Semi-mature	EM M <u>OM</u>	Early Mature Mature Over Mature			Condition:	C S B	Crown Stem Basal area	Stems: ERC:	Ø (Eq) Diameter Equivalent stem diameter using BS5837:2012 definition Estimated Remaining Contribution	

ARBORICULTURAL IMPACT ASSESSMENT

10.0 Below-Ground Constraints – Root Protection Area (RPA)

- 10.1 Section 3.7 of BS 5837: 2012 states that – “The Root Protection Area (RPA) is a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree’s viability, and where the protection of the roots and soil structure is treated as a priority.”
- 10.2 The RPA calculations were produced using information gathered from the tree survey section 4.6.1 of BS 5837:2012. This indicates the RPA in m² and minimum required all round radial distances for rooting zone protection and allows a view to be taken as to whether the trees can be retained safely without undue damage to their root systems. The RPA calculations are detailed in the appended tree survey, and the initial dimensions are marked on the 1:500 @ A3 tree constraints plan (Appendix 4).
- 10.3 Tree root morphology can be affected by numerous factors: availability of water, aeration, soil type, temperature, structure, compacted or impervious surfaces and proximity to buildings and other structures all affect the way roots develop and although the RPAs are marked on the plan as uniform polygons the actual root systems will be far more irregular. Root mapping or hand excavation under Arboricultural supervision could determine whether significant roots extend beyond the RPAs and require greater protection in relation to construction or whether it may be possible to develop within the RPA without a negative impact on the rooting environment.
- 10.4 Only T3, T6, and T7 are mentioned in Appendix 1 and predate the estate construction; T1, T2, T5, and T4 are postdated (information from the Occupier of 36 Summerhill), and root development has been established accordingly. With no roots found at ground level, I believe that the nominal RPAs shown in Appendix 4 are a fair representation of all trees surveyed.

11.0 Above-Ground Constraints

- 11.1 The trees' current size, future growth potential, shade, and leaf or fruit nuisance must be considered, as well as any potential impact on the proposed development. The attached tree survey provides detailed measurements of tree height and crown spread. The crown spread and shadow patterns of the trees throughout the day are clearly illustrated on the 1:500 @ A3 tree constraints plan (Appendix 4).

12.0 Comment

- 12.1 The 1:500 @ A3 development proposal plan (Appendix 4) shows that the construction of the four-bedroom dwelling will require the removal of tree T2 and the protection of the trees to be retained. The construction plan will lightly affect T1 and T3. T1, where the proposed car parking is; T3, where the rear garden landscaping will take place; and the remaining trees, T4, T5, T6 and T7 are sufficiently far away from the construction to have no impact on the development unless producing significant dust.
- 12.2 Construction traffic will access the property via Summerhill Road, crossing the dropped kerb and public footpath (Fig 2); machinery size is restricted to the ground bearing weights across the public footpath.
- 12.3 I am confident that the retained trees' current and future growth will not be adversely affected. The proposed design, especially for T1 and T3, may have a light impact on the root system's woody and fibrous areas. However, if the construction recommendations outlined in the report are followed, the trees' future health will remain unaffected.

13.0 Conclusion

- 13.1 With all appropriate precautionary measures, I consider the proposed development at 36 Summerhill Road feasible in relation to the surveyed trees for the following reasons.
- Given T2's limited arboricultural value and its non-native status, I've advised the removal of the Western Red Cedar (Category B) to support construction efforts. Removing this tree won't drastically alter the site's arboricultural character; instead, it will enhance T1's future growth within the crown area. The delicate balance and thoughtful consideration for T1's health make this a proactive, beneficial decision for the site's overall development.
 - With T2 removed, it is advisable to plant 2 two replacement trees within the development site; one Maple and one Rowan replacement trees should be planted within the north of this plot. Planting replacement trees on the local planning authority land will require planning permission.
 - Work is required within the RPA of T1 and T3, including a hardstanding parking area, the placement of a new boundary fence to the west of the plot, T1 and the rear landscaping under T3 (Appendix 5); all work within the RPAs will need to be carried out using hand tools only to avoid any accidental root damage, including compaction, no access for machines/ vehicles.

- I do not consider the current or future growth of these trees within the development to be impacted on the root system or overall tree health with the current envelope proposal with regards to the type of foundations as long as all recommendations are followed.
- Geocell or similar will need to be laid over the top of the root area of T1 with the Area marked in Appendix 3.
- You will need to lay 50-100mm of Geocell, as this does comply with BS5837, on top of a layer of non-compacting single-size grain sand under and over the exposed root area of T1. **(DO NOT use builders sand due to the high sodium content; this will affect the roots of T1)**
- To allow construction of the parking area and the continued unimpeded good continuous root growth of this tree; only hand digging or an air spade to be used to enable the placement of the Cellweb without damaging live roots
[GEOCELL Design Install Guidance Tree Root Protection.pdf \(terram.com\)](#)

I recommend following manufacturer installation guidelines.

The Root protection barrier must remain in place around T3 throughout the construction phase of this development to ensure maximum protection of this tree. Only during the final landscaping stage of the rear garden, after initial construction, can this barrier be removed to allow landscaping with hand tools only.

ARBORICULTURAL METHOD STATEMENT

- The development process should follow a sequence that results in the least risk to the retained trees, with tree protective fencing and exclusion zones in place as per the tree protection plan (TPP).
- The Arboricultural method statement includes the following tree protection plans.

<u>Appendix 6 -</u>	1:500 @A3	Tree protection plan showing the position of: • Protective barriers and construction exclusion zones. • Trees to be retained apart from T2, with a continuous red outline.
---------------------	-----------	--

14.0 Sequence of Events

14.1 Sequence of tree protection and precautionary measures in relation to phases of development.

<u>Pre-construction</u>	Site meeting	Coordinate with the project arboriculturist to effectively discuss tree protection measures with the architect, developer, and the local authority's arboricultural officer.
<u>Pre-construction</u>	Protective barriers	Mark the position of protective barrier forming construction exclusion zones.
	Protective barriers	Check the position of the protective barrier forming the construction exclusion zone.
<u>Construction</u>	Monitoring	Arboricultural monitoring every two weeks of continuous site activity.

15.0 Protective Barriers & Construction Exclusion Zone

- 15.1 Before construction begins and before any machinery or materials are brought to the site, it is essential to install protective barriers around the vulnerable Root Protection Area (RPA) for trees T1 and T3. These barriers, clearly marked with a **green broken line** on the tree protection plans (see Appendices 6), will establish a solid construction exclusion zone beyond the working area. These barriers will remain in place until the primary dwelling is completed, after which we can proceed with the construction of the parking area and the landscaping of the rear garden. It is important to note that all work within the RPA must be conducted exclusively with hand tools.

- 15.2 The construction exclusion zone, shown as **light purple horizontal hatching** on the tree protection plan, will be protected at all times during the development process; strictly, no access, construction activities, mixing materials, or storage will be allowed.
- 15.3 The barriers will have weatherproof signs stating that they protect trees within a **construction exclusion zone** and that **no works are permitted** beyond the barrier; the protective barrier should remain in place for the duration of the development process and should be checked daily to ensure the correct location.
- 15.4 The protective barriers must be positioned in accordance with the tree protection plans. **These barriers** will be constructed as outlined in Figure 2 of BS 5837:2012 (see Appendix 7) and consist of a robust vertical and horizontal scaffold framework securely braced to withstand impacts. Vertical tubes will be placed at a maximum interval of 3 meters, driven firmly into the ground, with weld mesh panels attached using wire or scaffold clamps.
- 15.5 When setting up the vertical and bracing poles, it is essential to avoid disrupting tree roots. Suppose conditions such as roots or hard surfaces prevent the use of driven poles. In that case, above-ground stabilisation will be implemented using struts mounted on a block tray, following the specifications in Figure 3 b) of BS 5837:2012.

16.0 Ground Protection

- 16.1 No vehicles or building materials are to enter or be stored within the RPAs of all trees on site.

17.0 Foundation Construction

- 17.1 Foundation depth should be determined by the architect or a structural engineer, in accordance with NHBC 2024 Chapter 4.2—Building near trees.
- 17.2 The excavation and construction of the parking area and fence line to the southwest for the new dwelling will occur within the retained trees' Root Protection Area (RPA). I anticipate encountering horse chestnut roots (T1) during the construction work.
- Careful use of hand tools will avoid bark damage of retained roots within the parking area, as marked in Appendix 6 in pink hatchings.
 - Exposed roots or fibrous root masses to be retained should be immediately covered with hessian or similar material to prevent drying.
 - individual roots less than 25mm in diameter that need to be removed should be cleanly severed/pruned where possible, with secateurs or a pruning saw, far enough back from the edge of the foundation (>100mm) that the effects of uncured cement do not impact tree health.

- the project arboriculturist will determine whether it is possible to sever/ prune roots greater than 25mm in diameter.
- Using impermeable membranes to line the excavations before the concrete is poured will help prevent damage caused by the cement's alkaline properties.

18.0 Infrastructure Requirements

18.1 It is essential to disclose the placement of services, including underground installations, above-ground services, CCTV cameras, electrical substations, refuse storage facilities, and lighting. Proactively addressing these elements will avoid adverse effects such as excessive tree pruning or damage to tree roots during and after the development process. Our proposed services will connect seamlessly to existing supplies that are situated outside of any Root Protection Area (RPA), and the electricity supply will be installed underground, ensuring minimal disruption to the environment.

18.2 To mitigate these risks, any infrastructure requirements identified after the planning phase must be carefully designed and evaluated in consultation with the project arboriculturist. This expert will guide you on how to minimise the impact on existing trees and maintain their health. Additionally, suppose any modifications to the infrastructure design could potentially affect the protected trees or their root systems. In that case, it is imperative to seek permission from the local planning authority to ensure compliance with regulations and protect the environment.

19.0 Additional Precautions

19.1 No storage or mixing of materials to take place within the construction exclusion zone or in the ground-protected RPA.

19.2 Materials will not be stored or mixed in any location where they may leak into the construction exclusion zone or RPA due to spillage.

19.3 Materials which may contaminate the soil will not be discharged within 10m of the tree stems or mixed in any location where gradients allow contaminants to run towards RPAs.

20.0 Supervision and Monitoring

20.1 The conditions attached to the planning consent must be adhered to at all times, and a monitoring regime regarding tree protection on site should be adopted.

20.2 An arboriculturist should be appointed to monitor tree protection measures and address any Arboricultural issues that may arise.

- 20.3 The project arboriculturist should mark the positions of the protective barriers and inspect them once they have been erected and before site work commences.
- 20.4 Regular site visits to inspect the protective barriers may be required in addition to any scheduled supervision. The frequency of the visits depends on the progress of the development, but they should take place every two to four weeks of continuous site activity.
- 20.5 A copy of a site visit and Arboricultural supervision record is shown in Appendix 8.
- 20.6 A copy of an Arboricultural monitoring record is shown at Appendix 9.
- 20.7 The principal contractor will ensure subcontractors comply with the Arboricultural method statement and do not undertake any operation likely to adversely impact any tree on site.
- 20.8 The main contractor will ensure that the build sequence is appropriate to prevent tree damage during development.

Appendix 2 – Tree survey definition of terms

<u>Tree ID/tag</u>	An identification number and/or tree tag number.
<u>Species</u>	Common and/or scientific name.
<u>Height (m)</u>	To the nearest 0.5m below 10m; to the nearest 1m above 10m
<u>Ø (mm)/No. of stems</u>	Stem diameter measured at 1.5m or equivalent with reference to Annex C of BS5837:2012.
<u>First branch</u>	Height above ground level and direction of the first significant branch.
<u>Crown spread (m)</u>	Measured at the cardinal points.
<u>Canopy height/clearance</u>	Crown clearance in metres above ground level at the cardinal points.
<u>RPA</u>	Root protection area (m ²) and length of radial protection (m).
<u>Age class</u>	Young: Less than approximately 10 years old. Semi-Mature: Less than 1/5 of typical life expectancy. Mature: Between 1/5 and 5/5 of typical life expectancy. Over-Mature: The tree has reached its maximum life span and is declining in health and size. Veteran: A tree that is of interest biologically, aesthetically or culturally because of its age, size or condition.
<u>Structural/physiological condition</u>	The general condition of the tree crown, stem, and basal area structure and form – is assessed as follows: Good: Good form, structure and vitality; no apparent signs of signs of decay, structural weakness, decline in health, health, pests or diseases. Fair: Moderate form and structure. Poor: Poor form or structure; significant decay, structural weakness or decline in vitality.
<u>BS 5837 category</u>	BS grading category is detailed in Appendix 3
<u>ERC</u>	Estimated remaining contribution

Trees Unsuitable for Retention

Category U 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 – shown in dark red on plans.

Trees To Be Considered for Retention

Category A High-quality trees with an estimated life expectancy of at least 40 years - shown in light green on plans.

1 - Mainly arboricultural qualities – trees that are good examples of their species, especially if rare or unusual, or those that are essential components of groups, formal or semi-formal arboricultural features.

2 - Mainly landscape qualities – trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.

3 - Mainly cultural values, including conservation – trees, groups or woodlands of significant conservation, historical, commemorative or other value.

Category B

Trees of moderate quality with an estimated life expectancy of at least 20 years - shown in mid-blue on plans.

1 - Mainly arboricultural qualities – trees that might be included in category A but are downgraded because of impaired condition (e.g. presence of significant but remediable defects) to the extent that they are unlikely to be suitable for retention beyond 40 years; or trees lacking the particular quality necessary for category A designation.

2 - Mainly landscape qualities – trees present in numbers, usually growing as groups or woodlands, that attract a higher collective rating than they might as individuals; or groups of trees situated so as to make little visual contribution to the wider locality.

3 - Mainly cultural values, including conservation – trees with material conservation or other cultural values.

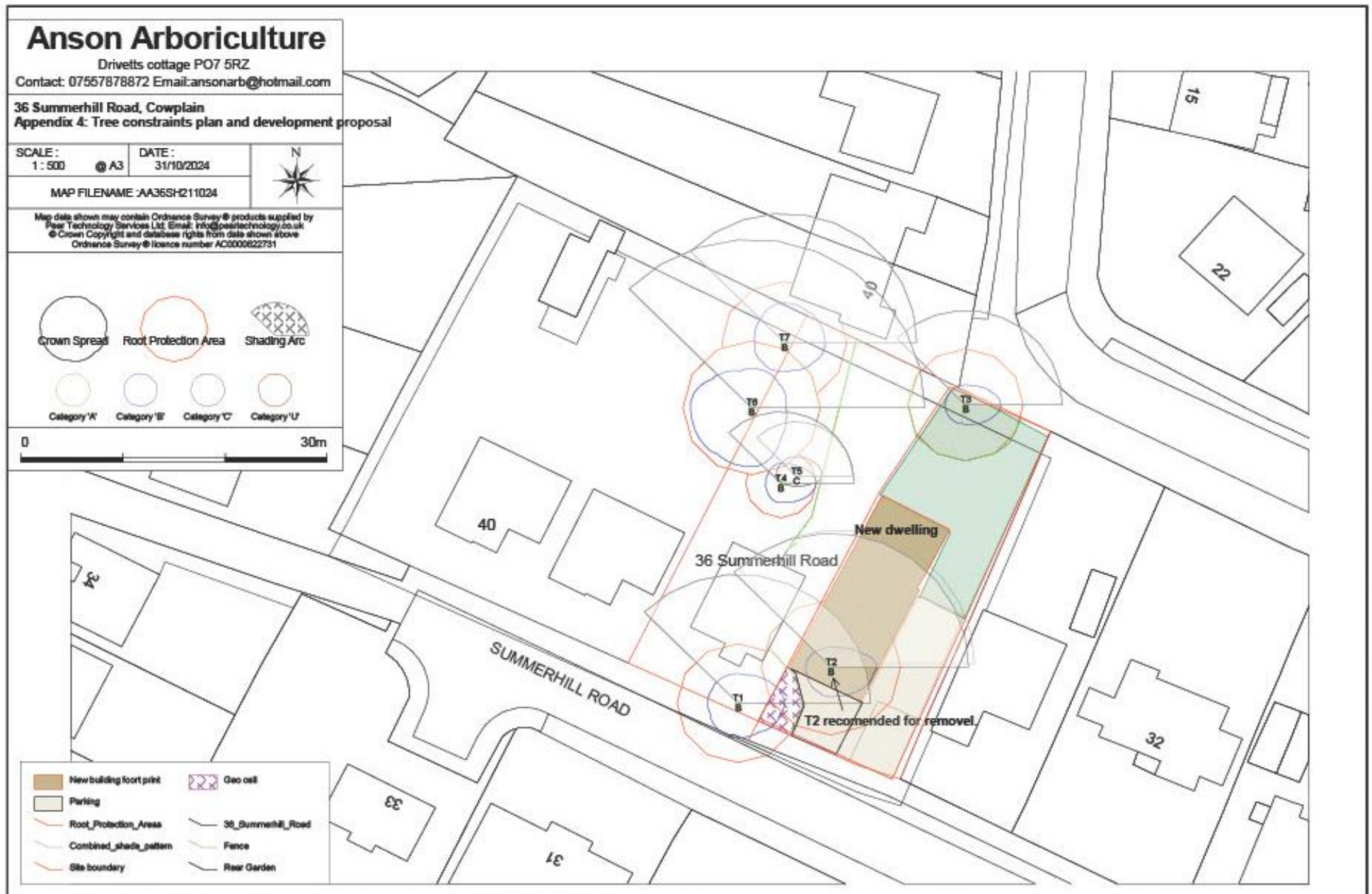
Category C

Trees of low quality with an estimated life expectancy of at least 10 years or young trees with a stem diameter under 150mm are shown in grey on plans.

1 - Mainly arboricultural qualities – unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.

2 - Mainly landscape qualities – 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 landscape benefits.

3 - Mainly cultural values, including conservation – trees with no material conservation or other cultural values.



Anson Arboriculture

Drivetts cottage PO7 5RZ

Contact: 07557878872 Email: ansonarb@hotmail.com

36 Summerhill Road, Cowplain
Appendix: 5 Landscaping plan

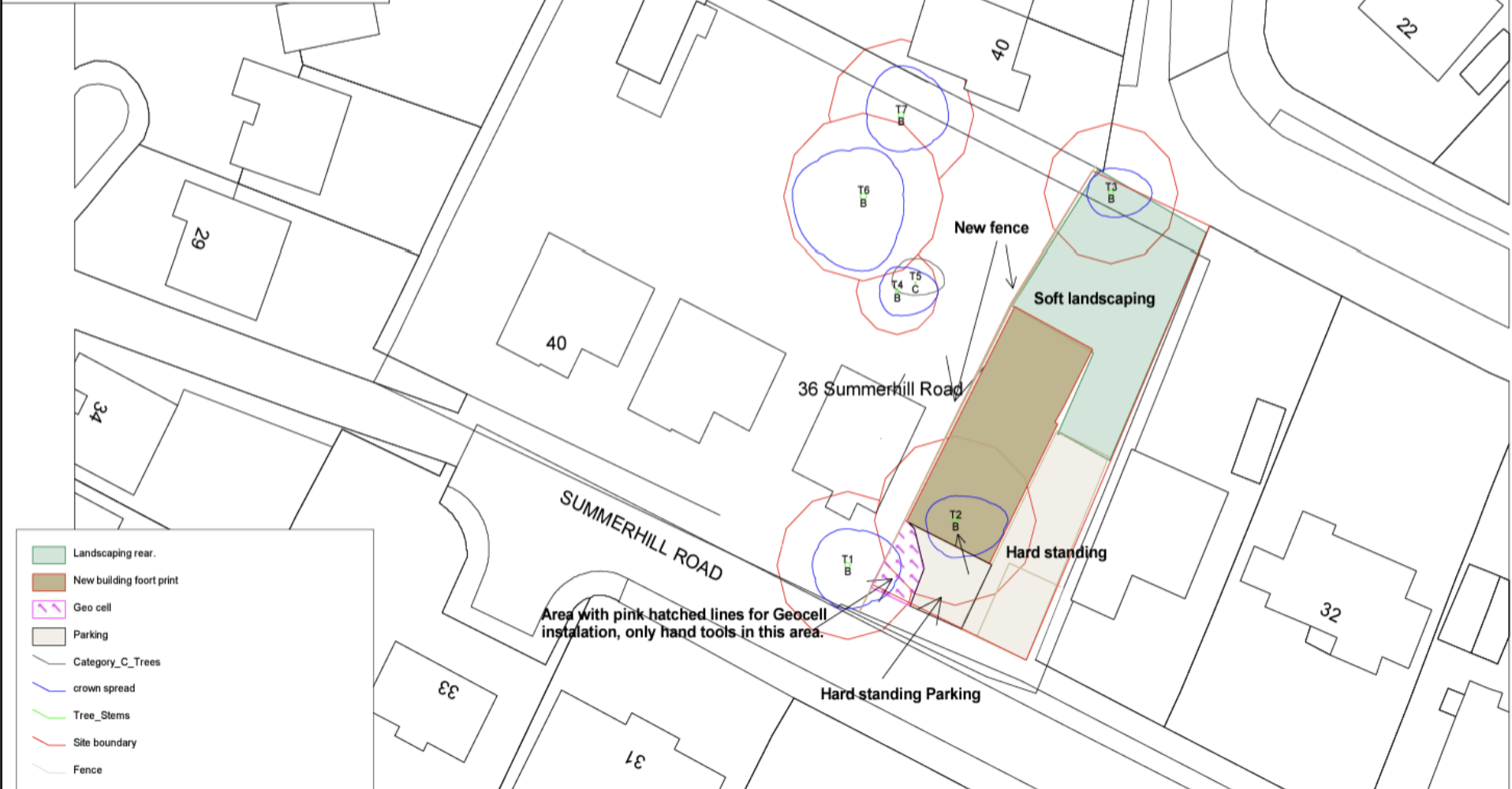
SCALE :
1 : 500 @ A4

DATE :
21/10/2024



MAP FILENAME :AA36SH211024

Map data shown may contain Ordnance Survey © products supplied by
Pear Technology Services Ltd; Email: info@peartechtechnology.co.uk
© Crown Copyright and database rights from date shown above
Ordnance Survey © licence number AC0000822731



Anson Arboriculture

Drivetts cottage PO7 5RZ
Contact: 07557878872 Email: ansonarb@hotmail.com

36 Summerhill Road, Cowplain
Appendix: 6 Tree Protection plan

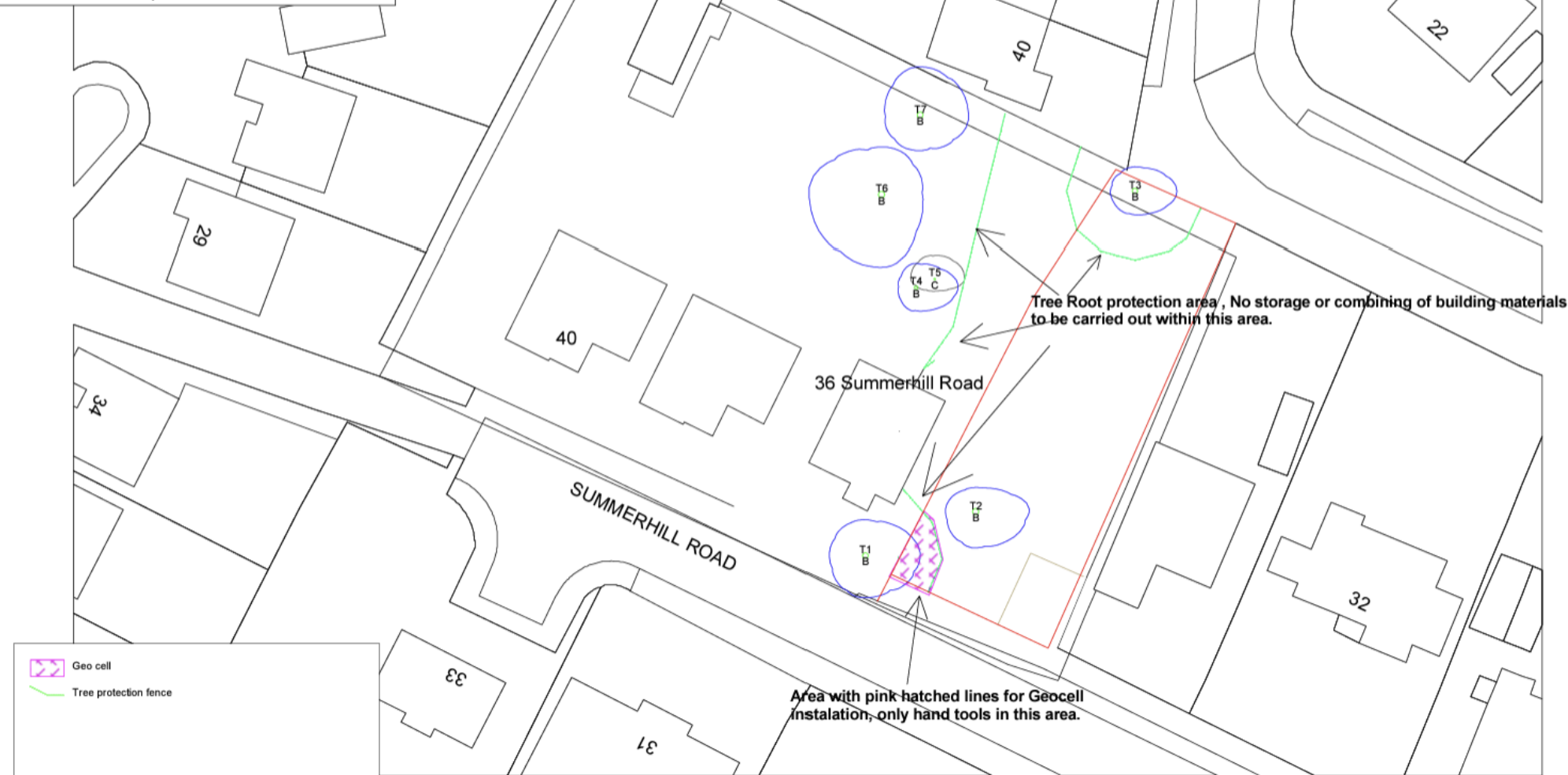
SCALE :
1 : 500 @ A4

DATE :
21/10/2024

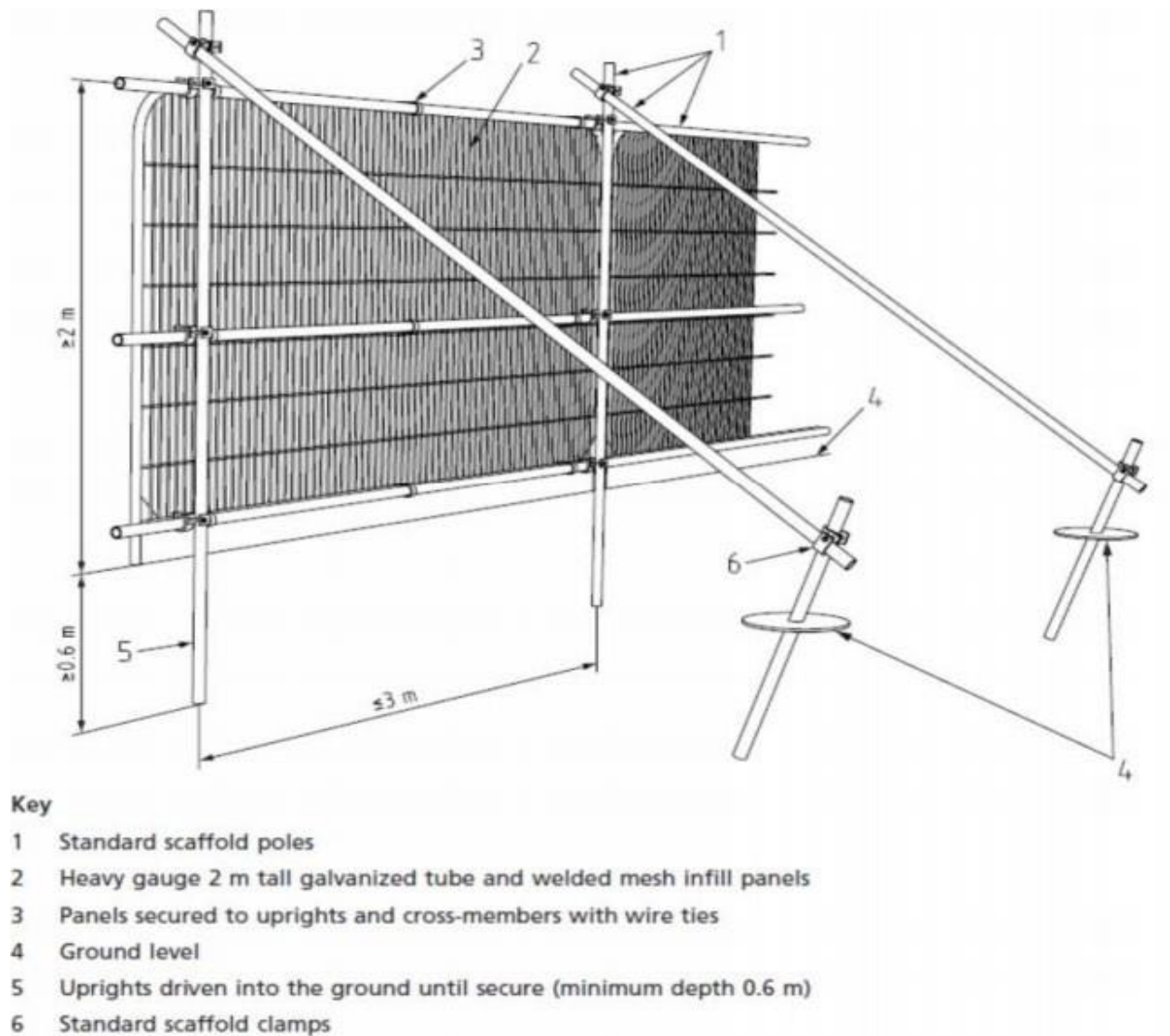


MAP FILENAME : AA36SH211024

Map data shown may contain Ordnance Survey © products supplied by
Pear Technology Services Ltd. Email: info@peartechnology.co.uk
© Crown Copyright and database rights from date shown above
Ordnance Survey © licence number AC0000822731

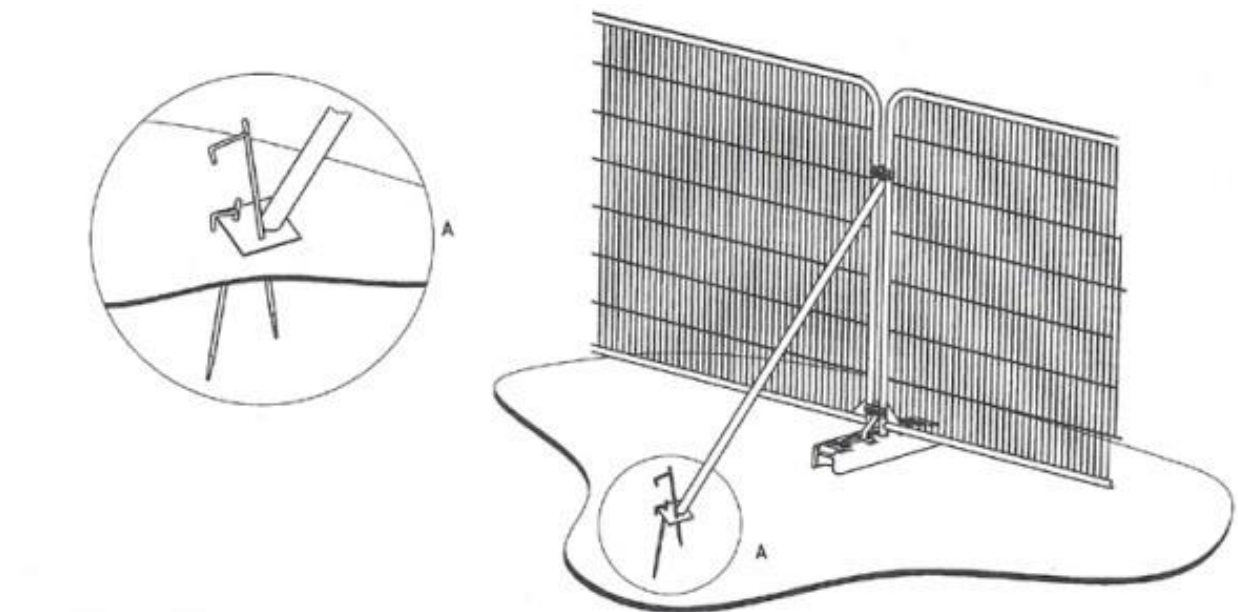


Appendix 7 – Protective Barrier

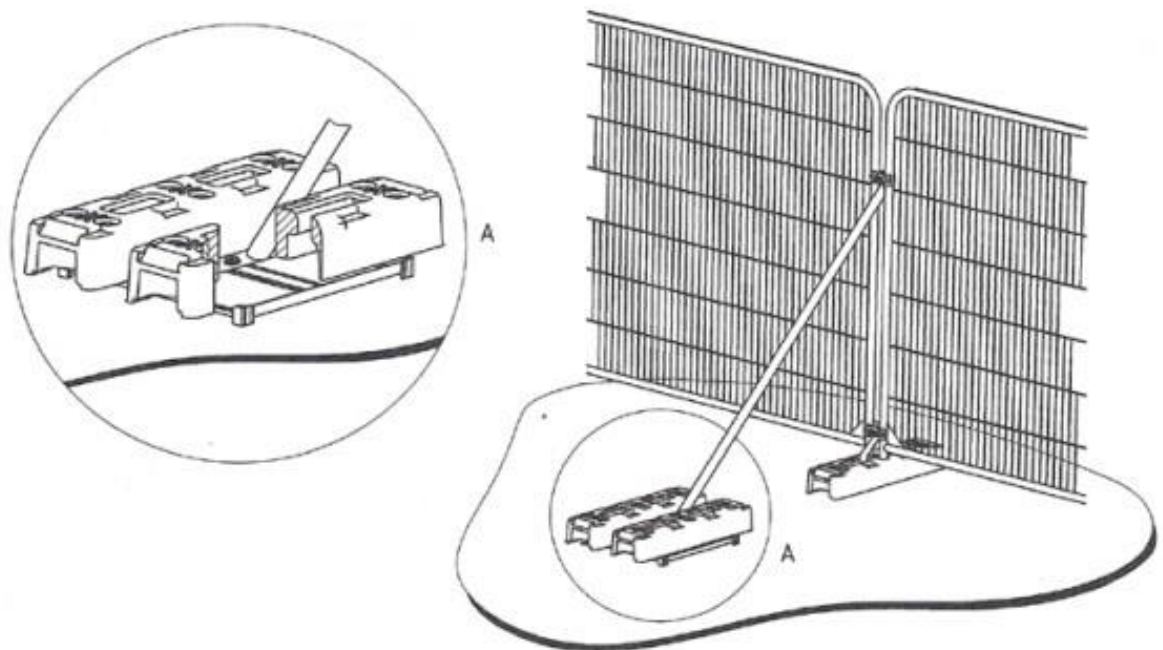


Default specification for protective barrier as per Figure 2 of BS 5837:2012 *Trees in relation to demolition and construction – Recommendations, Fourth (Present) Edition*. BSI

Appendix 7 – Protective Barrier



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

Examples of above-ground stabilising systems as per Figure 3 of BS 5837:2012 *Trees in relation to demolition and construction – Recommendations, Fourth (Present) Edition*. BSI

Appendix 8 - Record of Site Visits and Arboricultural Supervision

Client		Location	
Mr Karl Jenkins		36 Summerhill Road,	Cowplain
Local Planning Authority	Havant Borough Council		
Planning Application			
Development	Construction of a 4-bedroom dwelling and parking		

Stage of development	Action Required
Pre-Construction	Mark the position of the protective barrier forming the construction exclusion zone.

Notes	
--------------	--

Arboriculturalist	
Signed	
Date	

**NOTE - COPY OF COMPLETED
FORM TO BE SCANNED AND
SENT TO LPA
ARBORICULTURAL OFFICER**

Appendix 8 - Record of Site Visits and Arboricultural Supervision

Client		Location	
Mr Karl Jenkins		36 Summerhill Road,	Cowplain
Local Planning Authority	Havant Borough Council		
Planning Application			
Development	Construction of a 4-bedroom dwelling and parking		

Stage of development	Action Required
Pre-Construction	Check the position of the protective barrier forming the construction exclusion zone.

Notes	
--------------	--

Arboriculturalist	
Signed	
Date	

NOTE - COPY OF COMPLETED FORM TO BE SCANNED AND SENT TO LPA ARBORICULTURAL OFFICER

Appendix 9 - Arboricultural Monitoring Form

Client		Location	
Mr Karl Jenkins		36 Summerhill Road,	Cowplain
Local Planning Authority	Havant Borough Council		
Planning Application			
Development	Construction of a 4-bedroom dwelling and parking		

Area Inspected	Comments	Action Required
Protective barriers		
Construction exclusion zone		
Site storage/material mixing		
Other		
Additional Comments		

Arboriculturalist	
Signed	
Date	

**NOTE - COPY OF COMPLETED
FORM TO BE SCANNED AND
SENT TO LPA
ARBORICULTURAL OFFICER**