

Weir Cottage

Whitminster

GL2 7PN

BS5837 Tree Report



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1 Procedure:

I have been instructed by [REDACTED] to undertake a tree survey as part of a planning application process. This was to take place at Weir Cottage, Whitminster GL2 7PN on the 09th of December 2023 at 9.30am and is in line with BS5837: 2012 trees in relation to design, demolition & construction recommendations:

Trees are dynamic living organisms and are subject to rapid change. Trees within this report have been inspected from ground level only, if an Ariel inspection of the tree is required or other inspections such as a picus report these will be covered under recommendations. Any conditions/comments and recommendations only apply at the time of the inspection.

Tree survey & report has been completed by [REDACTED] is qualified to degree level and holds additional qualification i.e. Lantra Visual Tree Assessment and Quantified Tree Risk Assessment [REDACTED] has been in the forestry and Arboriculture industry for the past forty years, gaining knowledge in various areas. As well as doing reports and surveys he is an accredited city and guilds assessor and Lantra instructor in forestry and Arboriculture units.

The survey was accomplished by a site visit to ascertain the number of trees on the site along with their position in relation to the proposed development.

The survey was performed on a cloudy day with a temperature of around 11 degrees using the following tools

- Clinometer- used for establishing height of the tree.
- Binoculars- used for identifying defects within the crown.
- Nylon mallet- used to identify decay in the base of the tree and trunk.
- Quarter girth tape- measurement of the diameter of tree.
- Compass- ascertain, direction of crown formation and wind direction.
- Copy of BS5837:2012 booklet and Collins field guide- for references.
- Clipboard- hold pro forma sheets.
- Pencil & rubber- record information and correct.
- Mobile phone, camera - taking of images, ascertain information (internet)
- Probe/spike- testing of open cavities.
- Bushnell range finder – measures distance in meters or yards from a given position.

Information was recorded using PDA technology to produce a tree report. Appendix 2.

BS 5837: 2012 colours were used to represent the tree category of individual trees, along with the total number within that category. Table 1.

Tree position was plotted on an ordinance survey map assigned to a Trimble device. This information was then transferred to PT mapper which in turn produced maps of tree position, root protection areas and shade areas.

2 Documents referred to:

BS 5837:2012 trees, Trees in hard landscapes and NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees. These are national recognised standards used by local planning authorities to access planning applications.

3 Site Observation:

Site currently consists of a single height building (Bungalow) with land to the sides and and rear. The property sits directly below a canal lock. The canal is situated to the rear and western side of the property. On the Eastern side there is a large self contained caravan which it is proposed the house owners occupy while the extension is being built.

4 Executive Summary:

The proposal is to extend the original single main building as per the development plan. It is also proposed to alter the inside to maximize current floor space to accommodate a new bathroom and kitchen area.

5 Tree Survey retention category:

On the following page we can see table 1. Which is recording a breakdown of the numbers of trees in each retention category as defined by: BS5837: 2012 trees in relation to design, demolition & construction recommendations Appendix 1

Table 1

Retention category	Individual Trees	Groups of Trees	Hedgerows
A High Quality	2	n/a	n/a
B Moderate Quality	6	n/a	n/a
C Low Quality	0	n/a	n/a
U Remove	0	n/a	n/a
Total	8	0	0

6 Arboriculture Impact Assessment:

An arboriculture impact assessment was completed incorporating the following documents.

- Appendix 2 BS5837: 2012 tree Survey
- Appendix 3 Tree position plan
- Appendix 4 Tree protection plan
- Appendix 5 Shade areas

It was found that mitigation to the removal of trees would be low for the development of this site as only one tree is required for removal as this lies within the proposed development. However, compaction to the base of the trees to T4,5,6 and 7 is moderate to high with vehicle access, this could be lowered either by: Materials could be situated on the hard standing area at the front of the property. Or the use of Cellweb TRP, a tree root protection system, which complies to BS5837 2012

7 Tree Protection Scheme:

The area of the development does not allow tree protection barriers to be positioned beyond the RPAs. There for these will be positioned to a point that is most beneficial to the trees to prevent damage.

7.1 General

The long-term retention of trees relies on a successful implementation of tree protection and depends on the co-ordination between the client and personnel involved in the development.

The client and site agent shall insure that the site manager is provided with this document and is informed of approved changes or variations. It is essential, the site manager ensures all requirements of the Tree Protection Scheme are implemented.

All personnel working on site should be made aware of this document and have access including the plan to refer to before or during construction activities.

Tree protection methods are to be left in place until either the construction phase or construction site has been completed. Only exception to this is of written consent from the LPA.

Personnel must work in accordance with this document or its variations at all times.

7.2 Prohibited Activities

The following activities are not to be carried out on site under any circumstances:

1. Cutting down, uprooting, or damaging, destroying any part of the retained trees.
2. Retained trees are not to support equipment, signage, fencing, materials, or tree protection barriers.
3. The mixing of cement, chemical toilets or storage or use of anything that may be harmful to the tree, shall not take place within the RPA.
4. Plant, equipment, or vehicles with hydraulic arms within striking distance of the stem, branches or the RPA are prohibited unless otherwise specified.

7.3 Order & timing of operations:

- Installation of tree protection barriers.
- Construction to completion.
- Removal of tree protection barriers.

7.4 Protective barriers

All retained trees on site should be protected by barriers to BS5837:2012 before materials or machinery are brought on site. Including any demolition, development, or soil stripping commence.

Once installed barriers and ground protection must not be altered or removed unless recommended by the project arboriculturist or where approval by the LPA is given.

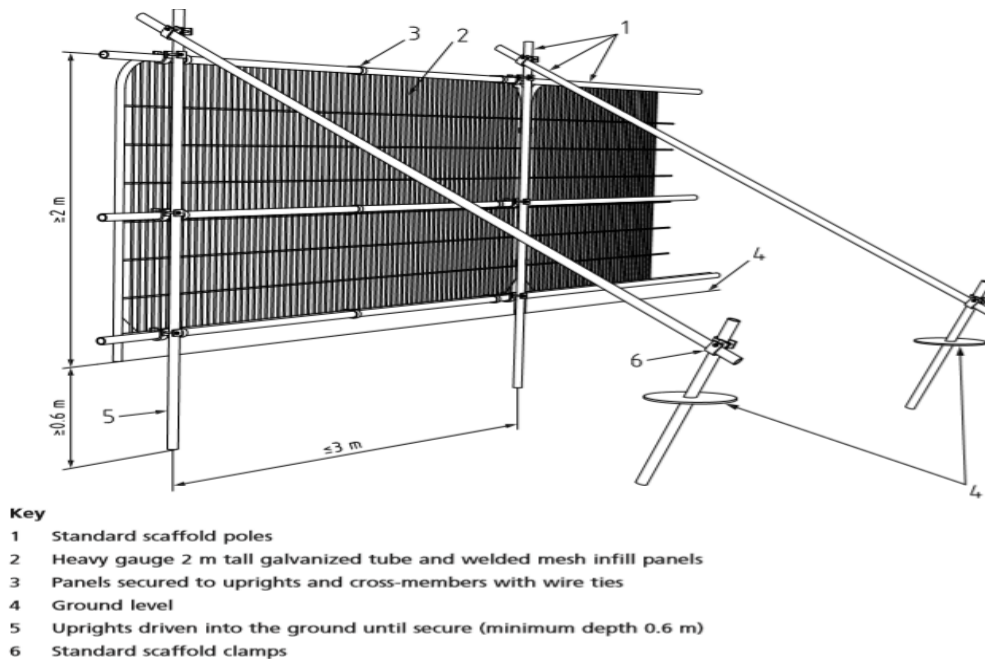
Before commencement of work, it must be confirmed by the project arboriculturist that all barriers and ground protection is set up correctly.

All barriers should be fit for purpose and should be rigid, complete, and appropriate for the work taking place around the retained trees.

The barrier should be a vertical scaffold framework that is braced to resist impacts as per fig 1.

Vertical tubes are spaced at 3-metre intervals (maximum) and are driven into the ground. Securely attached panels in the form of welded mesh are then attached to the frame. It is important to consider underground services and structural roots during the installation as these must not be damaged.

Fig 1 Tree protection barrier specification

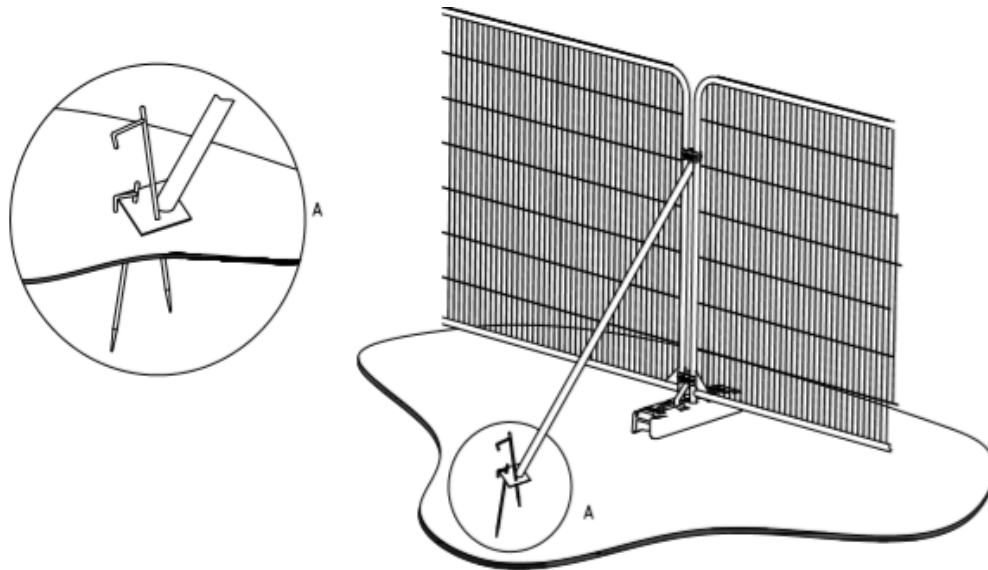


Where constraints prevent the use of this specification an alternative specification must be sought. As per fig 2.

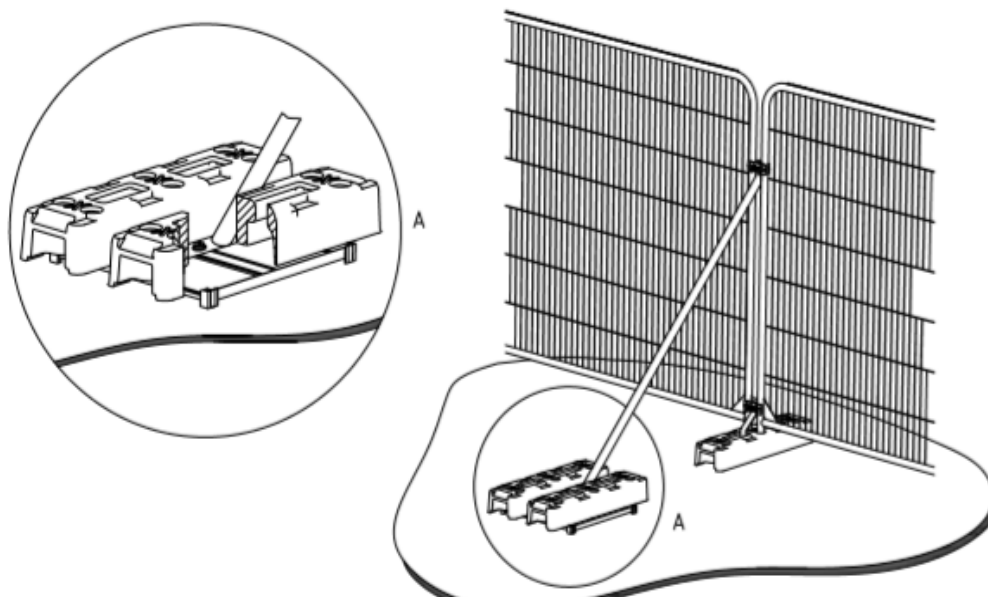
Where parts of the tree protection system are installed on hard surfaces the panels can sit in rubber or concrete feet, anchored by the securing pin. If it is not feasible to use ground pins due to the proximity of the barrier fence or that underlying services or structural roots might be compromised, rubber feet may be used to support the stabiliser strut.

Attached to the barriers should be all weather notices with wording such as "Construction Exclusion Zone - No Access" as per Appendix 5

Fig 2 Above ground stabilising systems



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on rubber tray

8 Pre-development tree work:

Work to the following trees will be required to allow for development of the proposed scheme.

- T1 Scott's Pine situated to the front of the property within the proposed development, to be removed

9 Method Statement:

Removal of tree, highlighted in section redevelopment tree work, will be in accordance with BS3998:2010 Tree Work. All work at height will be in accordance with ACOP (Approved code of Practice) Tree Work at Height recommendations along with Arboriculture Associations Technical guide 1, (tree climbing & rescue) and technical guide 2 (use of tools in the tree).

Groundwork operations will be conducted to Forestry industry safety accord (FISA) guides 301,302,303, 304 and 802 along with AFAG guide 604 for the use of Chipper.

All personal are to hold accredited qualification for the work they are proposed to undertake.

Appendix 1 Identification of tree category

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)	Identification on plan
Trees unsuitable for retention (see Note)		
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	<ul style="list-style-type: none"> 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 <p><i>NOTE</i> Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</p>	See Table 2
	1 Mainly arboricultural qualities	2 Mainly landscape qualities
		3 Mainly cultural values, including conservation
Trees to be considered for retention		
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	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
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits
		Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)
		Trees with material conservation or other cultural value
		Trees with no material conservation or other cultural value
		See Table 2
		See Table 2

Category U = Red

Category A = Green

Category B = Blue

Category C = Grey

BS5837:2012 Tree Survey

Client: MDH Forestry ()
 Project: Weir Cottage, QWhitminster GL2 7PN
 Survey Date: 08/12/2023
 Surveyor: ()



15, Manston Drive
 Wellesbourne
 Warwickshire
 CV35 9TG
 Phone: ()
 Mobile: ()

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m ²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
		No	Ø (mm)	Spread (m)	Clear (m)						
T1											
Scots Pine <i>Pinus sylvestris</i>	20	1	330	N	3	SM	A: 49.3 R: 3.96	Fair	C: Fair S: Fair B: Fair	Remove :: Unspecified Tree within proposed build	Estimated Measurements B.2 20 to 40 yrs
T2											
Silver Birch <i>Betula pendula</i>	18	1	240	N	3		A: 26.1 R: 2.88	Good	C: Good S: Good B: Fair	No action :: Unspecified	Estimated Measurements A.1.2 >40 yrs
T3											
Wild Cherry <i>Prunus avium</i>	2	1	110	N	1		A: 5.5 R: 1.32	Good	C: Good S: Good B: Fair	No action :: unspecified	Estimated Measurements B.1.2 >40 yrs
T4											
Scots Pine <i>Pinus sylvestris</i>	3	2	88 (Eq)	N	1		A: 3.5 R: 1.05	Good	C: Good S: Good B: Good	No action :: Unspecified	Estimated Measurements B.2 >40 yrs
Age Classifications:	N	Newly planted	EM	Early Mature							
	Y	Young	M	Mature							
	SM	Semi-mature	OM	Over Mature							
Condition:	C	Crown									
	S	Stem									
	B	Basal area									
Stems:	Ø	Diameter									
	(Eq)	Equivalent stem diameter using BS5837:2012 definition									
ERC:		Estimated Remaining Contributio									

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m ²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
		No	Ø (mm)	Spread (m)	Clear (m)						
Estimated Measurements											
T5 Wellingtonia <i>Sequoiadendron giganteum</i>	20	1	650	N	3		A: 191.2 R: 7.8	Fair	C: Good S: Fair B: Fair	No action :: Unspecified ----- Previous reduction on side and top	B.2 >40 yrs
Estimated Measurements											
T6 Bird Cherry <i>Prunus padus</i>	14	2	500 (Eq)	N	2		A: 113.1 R: 6	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified ----- Previous reduced top and side	B.3 20 to 40 yrs
Estimated Measurements											
T7 Common Laburnum <i>Laburnum anagyroides</i>	5	3	185 (Eq)	N	2		A: 15.5 R: 2.22	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified -----	A.2 20 to 40 yrs
Estimated Measurements											
T8 Cherry Laurel <i>Prunus laurocerasus</i>	12	1	128	N	2		A: 7.4 R: 1.53	Good	C: Fair S: Good B: Fair	No action :: Unspecified -----	B.2 >40 yrs
Age Classifications:	N	Newly planted	EM	Early Mature							
	Y	Young	M	Mature							
	SM	Semi-mature	OM	Over Mature							
Condition:	C	Crown									
	S	Stem									
	B	Basal area									
Stems:	Ø	Diameter									
	(Eq)	Equivalent stem diameter using BS5837:2012 definition									
ERC:		Estimated Remaining Contributio									

Report selection criteria.**Projects.**

Weir Cottage

Date Range.

Any Date

Work types.

----> No action :: Unspecified
 ----> -No Selection made-
 ----> Remove :: Unspecified

Latest Survey.

All surveys for the selected trees.
 ---> Last survey for each selected tree.

Work Completed.

---> Work Completed
 ---> Work Not Completed

Number of trees in selected Project(s) 8

Number of trees in Report selection 8

Age Classifications: N Newly planted EM Early Mature
 Y Young M Mature
 SM Semi-mature OM Over Mature

Condition: C Crown
 S Stem
 B Basal area

Stems: Ø Diameter
 (Eq) Equivalent stem diameter using BS5837:2012 definition
ERC: Estimated Remaining Contributio



Weir Cottage

SCALE : 1 : 750 @ A4 DATE : 08/01/2024



Tree ID and category [Filename]

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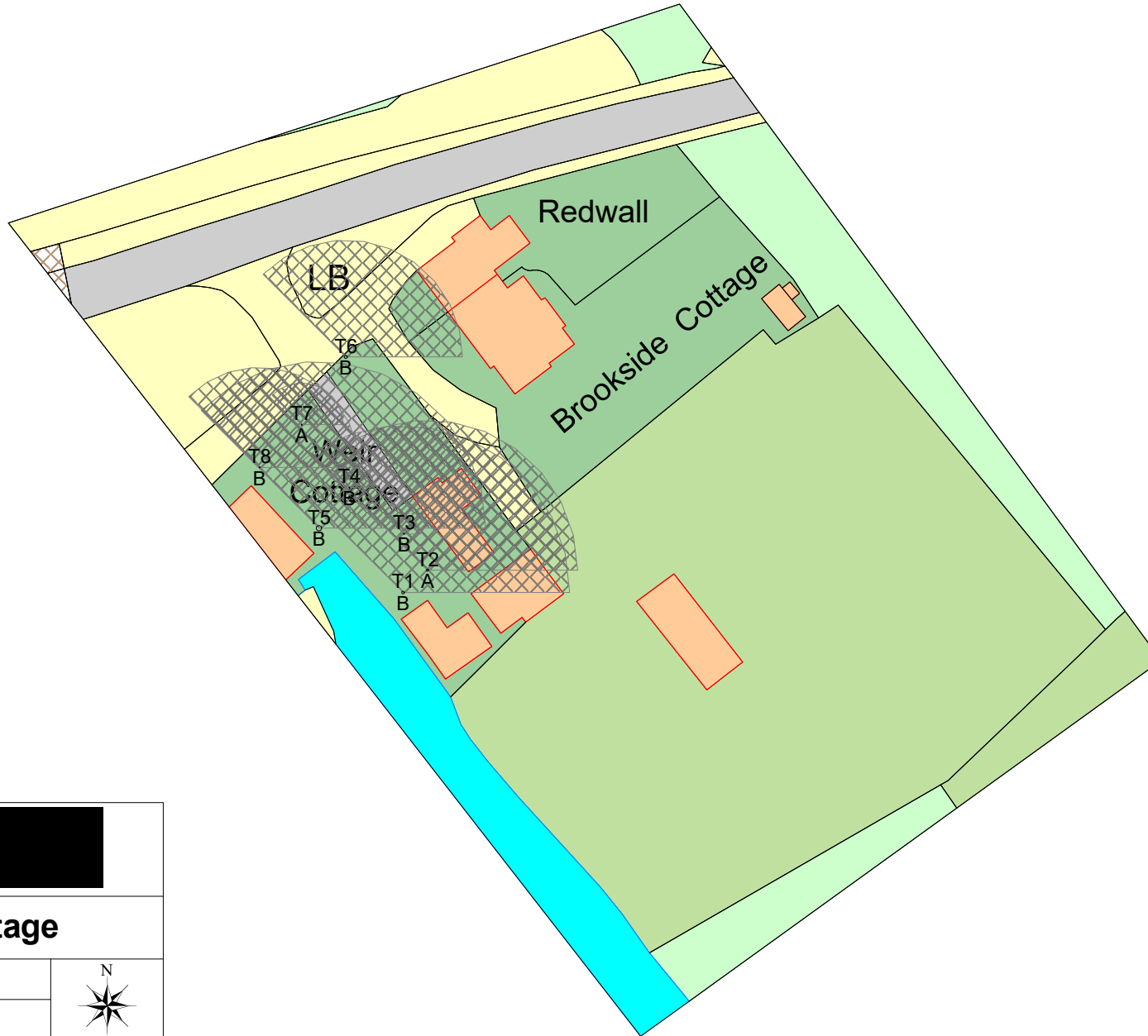
SCALE : 1 : 750 @ A4 DATE : 08/01/2024



Tree RPAs [Filename]

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Weir Cottage

SCALE : 1 : 750 @ A4 DATE : 08/01/2024



Tree shadow [Filename]

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