

Arboricultural Impact Assessment

Land at
Pear Tree Cottage
Frog Lane
Holt
Wrexham

Ref:
AIA/PTC/02/22

Date:
16th February 2022

Commissioned by:
Mr D. Edwards
on behalf of
Blueprint Architectural LTD

Prepared by
S. Shields

Arboricultural Impact Assessment

Pear Tree Cottage

Frog Lane

Holt

Wrexham

This Arboricultural Impact Assessment has been prepared in accordance with the protocols, standards and procedures set out in BS 5837: 2012 'Trees in relation to design, demolition and construction'.

Planning permission is being sought to develop site to provide two detached residential dwellings.

All trees on and immediately adjacent to the site have been surveyed and assessed in accordance with the recommendations of BS5837: 2012. The survey assessed eight individual trees, four groups of trees and four hedges, ranging in quality and amenity value from medium (1), low (13) to unsuitable for retention in the current context (2).

The proposed development would result in the loss of one category C tree, two category C hedgerows, one category U tree and category U group of trees.

Providing the recommendations of this report are followed, the loss of low value trees and hedgerows on this site would have a very low impact on public amenity and could be mitigated through new planting. The proposed development can be undertaken with minimum impact to the existing arboricultural environment.

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Date	Revision	
16 th February 2022		Issued for planning

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Instruction

- 1.1 Shields Arboricultural Consultancy received instructions from Mr D. Edwards on behalf of Blueprint Architectural LTD to undertake an arboricultural impact assessment at the above property. The client or their agents may copy and distribute this report as required for the purpose of applying for planning permission for or preparing any documents or plans for this or future applications at this site.
- 1.2 Planning permission is being sought to develop site to provide two detached residential dwellings along with access, parking and amenity space. A site layout plan ref: BC 152/008 has been provided and is considered in this assessment.

Scope & Limitations

- 2.1 The purpose of the report is to assess the environmental and amenity values of all trees on or adjacent to the area affected by the proposed development and is based on a site assessment undertaken 11th February 2022 by S. Shields, principal consultant Shields Arboricultural Consultancy. The report will assess the long-term contribution that the trees can make to the area and the arboricultural implications of retaining them and seek to find a satisfactory juxtaposition between the trees and the new development. The report will assess the potential impact that may arise as a result of the proposed construction works and make recommendations for protecting trees, hedges and shrubs where appropriate
- 2.2 The report is prepared in accordance with the recommendations of the British Standard Document BS 5837: 2012 'Trees in Relation to Construction'.
- 2.3 This report is not an ecological assessment and does not identify habitats or constitute a protected species survey.

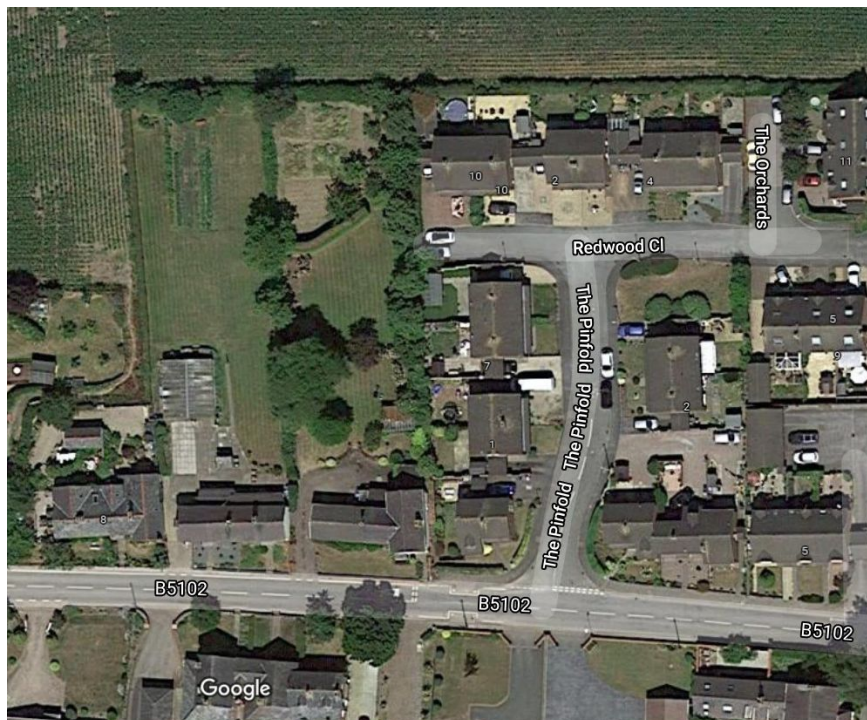
Statutory Controls & Obligations

- 3.1 Forestry Act; the felling of trees is controlled by the Forestry Act, which requires that a felling licence is obtained prior to cutting down any trees. The Forestry Act does not apply to the felling of trees growing within an orchard, private garden, churchyard or public open space. The Forestry Commission has the responsibility for enforcing the Forestry Act.
- 3.2 Tree Preservation Orders & Conservation Areas; Local Authorities have specific powers under the Town & Country Planning Act 1990 as amended, to protect trees through the use of Tree Preservation Orders. Where trees are protected under such orders it is a criminal offence (subject to any exemptions for which provision may be made by the act or order) to undertake, cause or permit the cutting down, topping, lopping, uprooting, wilful damage or wilful destruction of trees except with the consent of the local planning authority. Similar controls apply to all trees growing within a designated Conservation Area.

- 3.3 Bats, wild birds and other protected species; The Wildlife & Countryside Act & the Conservation (Natural Habitats & C.) Regulations make it an offence to disturb or destroy bats and bat roosts and wild birds and their nests. Other species of plant and animal are also protected. These creatures often inhabit trees and sufficient care must be taken to ensure they are not affected during forestry and arboricultural works.

Site description

- 4.1 The proposed development site is located on land to the rear of Pear Tree Cottage and is currently used as garden area for that property. The site would be accessed from Redwood Close, to the east of the site. The site has boundaries with farmland to the north and residential properties to the east, south and west.
- 4.2 The site extends to 0.07ha, is level and at an elevation of 18m AOD and is reasonably sheltered. There are a number garden and orchard tree on the site.



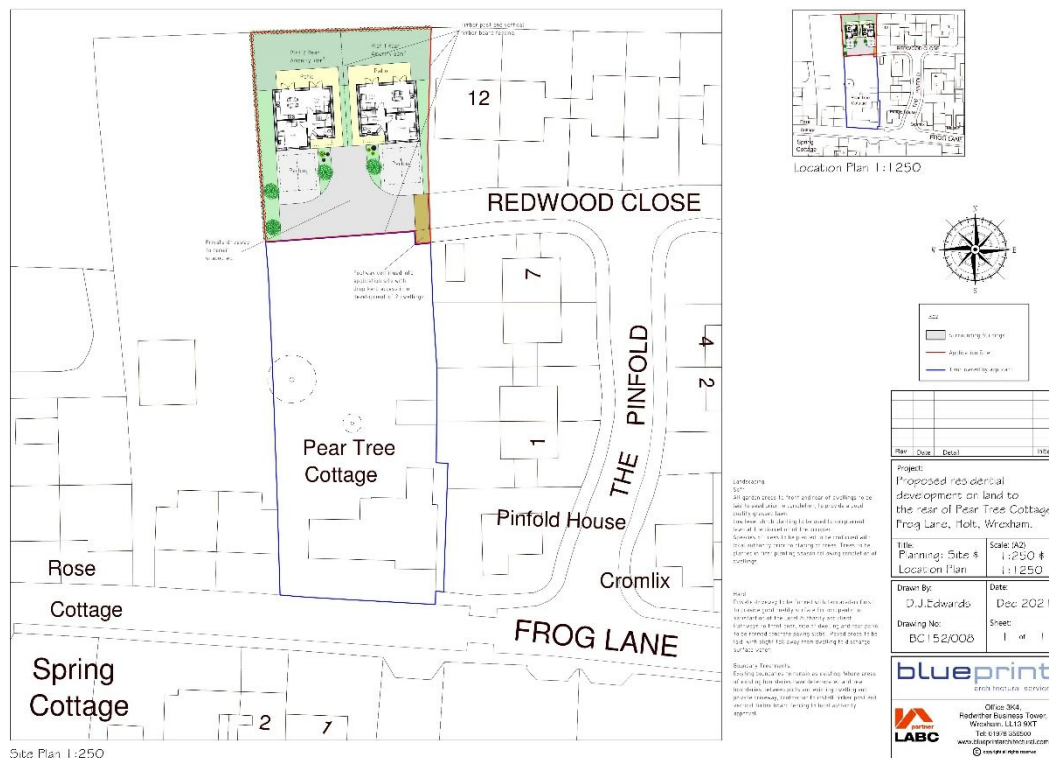
Soils

- 4.3 The site is free draining cultivated brown earth. Geological maps indicate deposits of sand and gravel over a sandstone lithology. There are no significant impediments to root development.

NB. This soil assessment is undertaken in situ using visual and manual techniques and is **only** for the purpose of establishing the influence of site soils on tree growth. The assessment **must not** be relied upon to inform any engineering decisions.

Development Proposal

- 5.1 Planning permission is being sought to develop site to provide two detached residential dwellings along with access, parking and amenity space.



Tree Survey Methodology

- 6.1 All trees within and adjacent to the site have been assessed where they are within 15 m of any area that may be disturbed as a result of the proposed development and have a stem diameter over 75mm at 1.5 metres. Measurements have been taken in accordance with the procedures and protocols set out in BS 5837: 2012 and the Forest Mensuration Handbook. Height measurements are approximate unless otherwise stated. Trees have been assessed as individuals, groups or woodlands as appropriate. Where access to trees has been restricted, either as a result of their situation on private land or where vegetation or ground conditions are unfavourable, an estimation of trunk diameter has been made. This entails using a set of callipers to approximate the measurement. Estimates are rounded up to provide a margin. This technique has only been used where there is a sufficient buffer between the RPAs and any area disturbed by development. Where trees are in woodlands or groups only the outside edge trees are assessed unless there are larger trees with RPAs or crowns that would overlap the edge trees.
- 6.2 BS 5837: 2012 provides the framework through which tree can be categorised in terms of their health, amenity value and long-term viability for retention on a development site. There are four categories, A,B,C & U.

Category A: Trees of high quality and value in such a condition as to be able to make a substantial contribution (a minimum of 40 years)

- 1 Trees that are particularly good examples of their species, or essential components of groups or formal arboricultural features.
- 2 Trees, groups or woodlands that provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance.
- 3 Trees, groups or woodlands of significant conservation, historical, commemorative or other value.

Category B: Trees of moderate quality and value in such a condition to make a significant contribution (a minimum of 20 years)

- 1 Trees that might be included in a higher category but are downgraded because of impaired condition.
- 2 Trees present in numbers, usually as groups of woodlands that form distinctive landscape features.
- 3 Trees with clearly identifiable conservation or other cultural benefits.

Category C: Trees of low quality and value currently in adequate condition to remain until new planting could be established. Trees in this category would not usually be retained if they would pose a significant constraint to development.

Category U: Trees in such a condition that their existing value would be lost within 10 years and which should, in the current context be removed for arboricultural reasons.

The most significant or valuable trees are placed in the categories, A & B. Site design should make provision to retain trees in these categories and most Local Planning Authorities will insist upon this (or in exceptional circumstances will require that significant compensation planting is incorporated into the design), whilst trees that should not be a constraint to development are recorded with a C category. Trees categorised as U are in a poor condition and should be removed prior to the commencement of work.

- 6.3 Where trees are to be retained, it is necessary to ensure that they are suitably protected to avoid damage during the construction phase of the development. It is also important to consider any long term implications, such as issues with shading or leaf litter that may arise as a result of tree retention.
- 6.4 To ensure that trees are not adversely affected by the construction works it is necessary to:
 - a. The avoidance of physical damage to the aerial parts of the trees (i.e. Impact and other damage to trunk and branches)
 - b. The avoidance of damage to retained trees as a result of the severance or other physical damage to their roots

- c. Preserve of the character of the soil, through the avoidance of any activity that would cause it to become compacted or otherwise disturbed or disrupted, and to avoid contamination by potentially harmful substances
- d. To ensure free gaseous exchange is permitted between the upper layers of soil and the atmosphere
- e. To ensure adequate (but not excessive) water supply to the soil and hence to tree roots

This would normally be achieved by establishing an area, known as a construction exclusion zone (CEZ) around each tree. The CEZ is derived from the root protection area (RPA) and the crown spread of the tree. The RPA represents the area occupied by the tree's root system and is calculated for each tree based on its stem diameter and the ground conditions present taking account of and any impediment to rooting. The RPA should represent the most probable position of the tree's root system.

The CEZ must be considered sacrosanct and be maintained completely undisturbed. No construction should take place within this area and it should not be used for storage of materials or fuels. Access for vehicles machinery or personnel is prohibited and to ensure that it is not damaged by construction activity it must be suitably protected during the construction phase, using robust fencing or alternative ground protection methods, to prevent disturbance and damage occurring.

- 6.5 In addition to the implications that a new development may have for existing trees it is also important to assess any long-term issues or concerns that may arise as a result of retaining trees close to a new dwelling or structure. This can include problems associated with leaf litter and other debris that may fall from trees, the potential that a tree has to cause damage to a structure in the future, any on-going maintenance requirements that may arise and the level of shade that the tree may cast, it is particularly important to consider the effects of shading where trees are to the south of houses and gardens. Trees can also cause feelings of apprehension to the occupiers of nearby buildings and can have an over-bearing impact on a property if adequate space is not provided.
- 6.6 The report assesses all trees with regard to their size, position and natural characteristics, and taking into account of their future growth makes provides recommendations as to their long-term suitability for retention.

Arboricultural Assessment

- 7.1 Full details of the tree surveyed are provided in appendix A. and their relative positions, crown spreads, root protection areas are indicated on the attached plans.
- 7.2 No checks have been undertaken to establish the status of the trees with regards to Tree Preservation Orders or Conservation Areas, however all the trees may be subject to the Forestry Act (see section 3.1) and some hedges subject to the Hedgerow regulations (see section 3.3). No trees or hedges should be felled, lopped, topped or in otherwise removed or damaged without prior permission from the relevant authority.
- 7.3 The survey recorded eight individual trees, four groups of trees and four hedges, which are categorised as follows:

Category	Quantity
Category A: Trees of high quality and value in such a condition as to be able to make a substantial contribution (a minimum of 40 years)	0
Category B: Trees of moderate quality and value in such a condition to make a significant contribution (a minimum of 20 years)	1
Category C: Trees of low quality and value currently in adequate condition to remain until new planting could be established. Trees in this category would not usually be retained if they would pose a significant constraint to development.	13
Category U: Trees in such a condition that their existing value would be lost within 10 years and which should, in the current context be removed for arboricultural reasons.	2

Arboricultural merits and the significance of the trees in the landscape

- 7.4 The site and surrounding area are on the outskirts of a residential village. The area is characterised by private gardens with ornamental and fruit trees and by a typical arable farmland landscape of hedges and scattered hedgerow trees over the wider landscape area.
- 7.5 The site supports a number small number of trees and hedges, mainly old fruit trees, but with one more prominent specimen situated in the retained garden area of Pear Tree Cottage.
- 7.6 A search of the ancient tree inventory <https://ati.woodlandtrust.org.uk/> and the Lle database [Lle - Ancient Woodland Inventory 2021 \(gov.wales\)](#) indicate that there are no veteran trees or areas of ancient woodland recorded on or adjacent to the site.
- 7.7 The TPO status of the trees on and adjacent to the site is not know but the Wrexham Council Conservation Area Map for Holt [Holt Conservation Area Map \(wrexham.gov.uk\)](#) indicates that the site is within the Conservation Area.

Policy Considerations

7.8 Section 6.4.24 – 6.4.26 of Planning Policy Wales states that:

‘Trees, woodlands, copses and hedgerows are of great importance for biodiversity. They are important connecting habitats for resilient ecological networks and make a valuable wider contribution to landscape character, sense of place, air quality, recreation and local climate moderation. They also play a vital role in tackling the climate emergency by locking up carbon, and can provide shade and shelter, a sustainable energy source and building materials. The particular role, siting and design requirements of urban trees in providing health and well-being benefits to communities, now and in the future should be promoted as part of plan making and decision taking.’

‘Planning authorities should protect trees, hedgerows, groups of trees and areas of woodland where they have ecological value, contribute to the character or amenity of a particular locality, or perform a beneficial and identified green infrastructure function. Planning authorities should consider the importance of native woodland and valued trees, and should have regard, where appropriate, to local authority tree strategies or SPG. Permanent removal of woodland should only be permitted where it would achieve significant and clearly defined public benefits. Where woodland or trees are removed as part of a proposed scheme, developers will be expected to provide compensatory planting.’

‘Ancient woodland and semi-natural woodlands and individual ancient, veteran and heritage trees are irreplaceable natural resources, and have significant landscape, biodiversity and cultural value. Such trees and woodlands should be afforded protection from development which would result in their loss or deterioration unless there are significant and clearly defined public benefits; this protection should prevent potentially damaging operations and their unnecessary loss. In the case of a site recorded on the Ancient Woodland Inventory, authorities should consider the advice of NRW. Planning authorities should also have regard to the Ancient Tree Inventory.’

‘The protection and planting of trees and hedgerows should be delivered, where appropriate, through locally specific strategies and policies, through imposing conditions when granting planning permission, and/or by making Tree Preservation Orders (TPOs). They should also be incorporated into Green Infrastructure Assessments and plans.’

7.9 The Wrexham Unitary Development Plan Policy EC4 – Hedgerows, Trees and Woodland advises that

‘Development proposals should provide for the conservation and management of hedgerows, trees, orchards, woodland, wildlife and other natural landscape and water features, and include new planting in order to enhance the character of the landscape and townscape.’

Development which results in the loss or significant damage to valuable trees, important hedgerows or ancient woodland sites will not be permitted.'

This policy should be considered with reference to Local Planning Guidance Note 17 'Trees & Development' [Local Planning Guidance Note No 17 - Trees and Development \(wrexham.gov.uk\)](http://wrexham.gov.uk).

Design Considerations

- 7.10 There are no significant arboricultural constraints on the site as the most significant features are away from the proposed development area and can be retained and protected, however the layout should provide for a reasonable level of new planting to compensate for loss of canopy cover and to provide a biodiversity nett gain.
- 7.11 In addition to ensuring that the retained trees are not damaged by the construction process, consideration should also be given to the future implications associated with the retention of the trees in the terms of their influence on the new properties. To ensure a harmonious relationship between the trees and the proposed dwellings it is necessary to allow adequate separation so that the trees do not exert an overbearing influence, are so close as to promote worries about tree safety and avoid problems associated with leaf litter and shading.
- 7.11 Guidance provided in the British Standard BS 5837: 2012, advises that shading of buildings can be a problem, particularly where trees are to the south or the southwest of houses and gardens and site should be designed to take account of existing trees and any new planting, their ultimate size and density of the foliage and that garden areas should be designed to meet the normal requirement for direct sunlight for at least part of the day. Building Research Establishment guide to good practice (BR209) Site Layout Planning for Daylight and Sunlight advises that, in order to appear reasonably sunlit a dwelling should have at least one main window wall that faces within 90° of due south and that on this wall, all points on a line 2m above ground level are within 4m of a point which receives at least a quarter of the annual probable sunlight hours. The guide also advises that for gardens to appear adequately sunlit, no more than two-fifths and preferably no more than a quarter should be prevented from receiving any sunlight on 21st March.
- 7.12 In this case the trees are relatively small specimens around the boundary of the site and their impact will be limited. The more significant trees are a considerable distance from the proposed dwellings.
- 7.13 To ensure that trees do not become overbearing or exert a dominating effect on a property it is recommended that no occupied property is sited within a distance from the trunk equivalent to 50% of the mature height of a tree (see appendix A), which should be increased to 60% if the tree is directly to the south of a property. There should also be a distance of at least 1.5 metres from the edge of the crown to the

building at the closest point, this must take account of the ultimate spread of the tree. No more than 40% of a garden area should be beneath the crown of a tree, and the remaining area should not be shaded by the tree. In this case all requirements for separation are met.

- 7.14 All services both under and over ground must be located outside the CEZ around retained trees. All services must be installed in compliance with NJUG chapter 4 recommendations.

Arboricultural Impact

Impact	Category A	Category B	Category C	Category U
Tree Removal			H6, T10, H12	G9, T11
Facilitative Pruning Required				
RPA Encroachment			T5	
Potential Shading				
Proximity Issues				

- 7.15 The proposed development will require the removal of two trees, one category C and one category U, one group of trees, category U and two hedges, both category C. There would also be encroachment into the RPA of one category C tree, T5, although it may be considered preferable to remove and replace this tree. If it is considered desirable to retain T5 a 'no dig construction method would be required for forming the access road and parking area. The area would extend to 25m², which is 22% of the total RPA of the tree and slightly over the BS 5837: 2012 recommended maximum of 20%, however, there is ample space on the west and south of the tree to allow for compensatory root growth.
- 7.16 There are no significant impacts to the residential amenity of the proposed dwellings from the retained trees.
- 7.17 The loss of low value trees and hedgerows on this site would have a very low impact on public amenity and could be mitigated through new planting.

Landscaping

- 7.18 There is space on the site to allow for the planting of new trees to compensate for the loss of canopy cover associated with the proposed development.

Arboricultural Operations

Permission to remove any tree must be obtained from the Local Planning Authority and must not be undertaken until a Full Planning Permission has been granted and all pre-commencement conditions have been discharged. In cases where trees are protected by Tree Preservation Orders or Conservation Areas additional consent may be required.

- 8.1 The proposal will require the removal of trees and subject to obtaining any required permissions it is recommended that the work should be undertaken by a suitably qualified person, holding public liability insurance for the sum of £5,000 000. All operators must hold relevant NPTC certificates. A site-specific risk assessment must be prepared and operators must work to a health and safety method statement. The use of Arboricultural Association Approved Contractors www.trees.org.uk/find-a-professional/Directory-of-Tree-Surgeons is recommended.
- 8.2 The contractor undertaking the work is responsible for any loss or damage arising as a result of the operations and agrees to indemnify the owner against such occurrences.

Formation of No Dig CCS Driveway

No Dig CCS Driveway Performance Specification

NB Where no dig construction is specified this must be installed prior to any machinery access in the area or an alternative temporary ground protection system must be used.

- 9.1 In order to provide the new access and parking within the RPA of tree T5, if retained, it would be necessary to use a 'no dig construction method within the area designated as the Precautionary Area as there is the potential for traditional driveway construction to cause damage to the tree's root system and soil environment, which would be detrimental to it, to avoid this an alternative method of construction is recommended. In this case, as the ground conditions appear to be suitable, it is recommended that a no dig above ground method, such as the cell web TRP cellular confinement system (*Geosynthetics Limited, Fleming Road, Harrowbrook Ind Est, Hinckley, Leicestershire, LE10 3DU. Tel: 01455 617139*) be used.
- 9.2 Essentially no-dig CCS are installed over existing ground levels and without the need for compacting the sub-base. This ensures that the trees' root systems are not damaged by excavation and the soil structure is maintained. Using a porous tarmac or other porous top surface such as gravel, ensures that water can permeate through the footpath to the root system and the exchange of gases and oxygen between the soil and the air is unaffected and is recommended. The CCS must be installed in accordance with the details provided in the AMS (see section 10).

- 9.3 The design will need to consider surface transitions between the existing highway and new driveway. In this case, the heights between the existing road and new driveway can be addressed within the site.

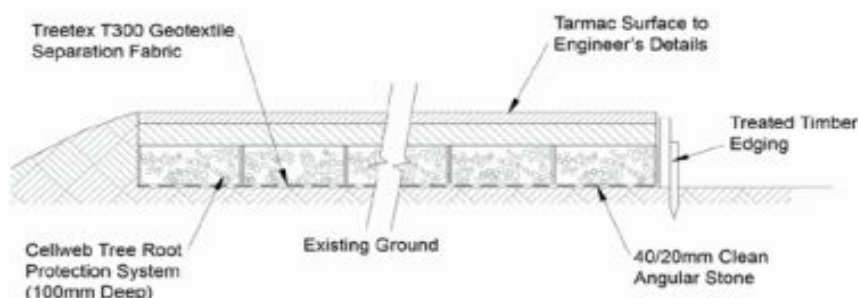


Figure 1 Illustration of Cellweb TRP 100mm Cellular Confinement System

- 9.4 The CCS system is edged using treat timber boards held in place with short stakes. There a gap of 1m between the CCS and the base of any retained tree must be maintained. The edges of the CCS can be incorporated into the landscape using granular fill soil to create a graded edge.

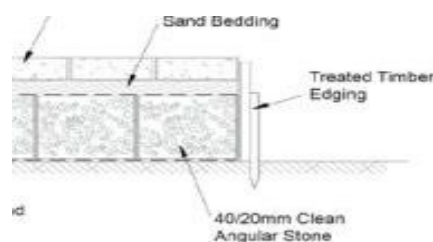


Figure 2 Illustration of Cellweb edging

- N.B This report does not provide engineering specifications for the no dig CCS Driveway and the suitability for the use of a 3-dimensional grid system in this location must be confirmed by an appropriately qualified person. Geosynthetics Limited provides a design service for their products.*

Arboricultural Method Statement

- 10.1 This arboricultural method statement (AMS) sets out the details of tree protection measures afforded to the retained trees on and adjacent to the site.
- 10.2 This AMS should be read in conjunction with the Tree Protection Plan PTC/TPP/OL/02/22. The TPP indicates the construction exclusion zone (CEZ) that must be maintained around each retained tree. These areas must remain undisturbed during the construction process and must be protected using suitable fencing or ground protection as specified.
- 10.3 Copies of the TPP & the AMS must be available on site and all tree protection requirements explained to all persons undertaking activities on the site during the site induction process.

- 10.4 All general tree protection measures must be installed and inspected prior to bringing onto the site any plant, materials or equipment or undertaking any construction works or demolition or any arboricultural works. The LPA must be informed in writing once the tree protection measures are installed.
- 10.5 The site is to be inspected by the consulting arboriculturalist in accordance with the schedule of inspections (see section 10.27).
- 10.6 All measurements are given in metric using standard abbreviations.

Fencing and Ground Protection

- 10.7 The TPP indicates the position all protective fences.
- 10.8 Protective fencing will comprise herras fencing, securely fixed into place and braced to resist impact, or as otherwise agreed with the Local Planning Authority.

Figure 2 Default specification for protective barrier

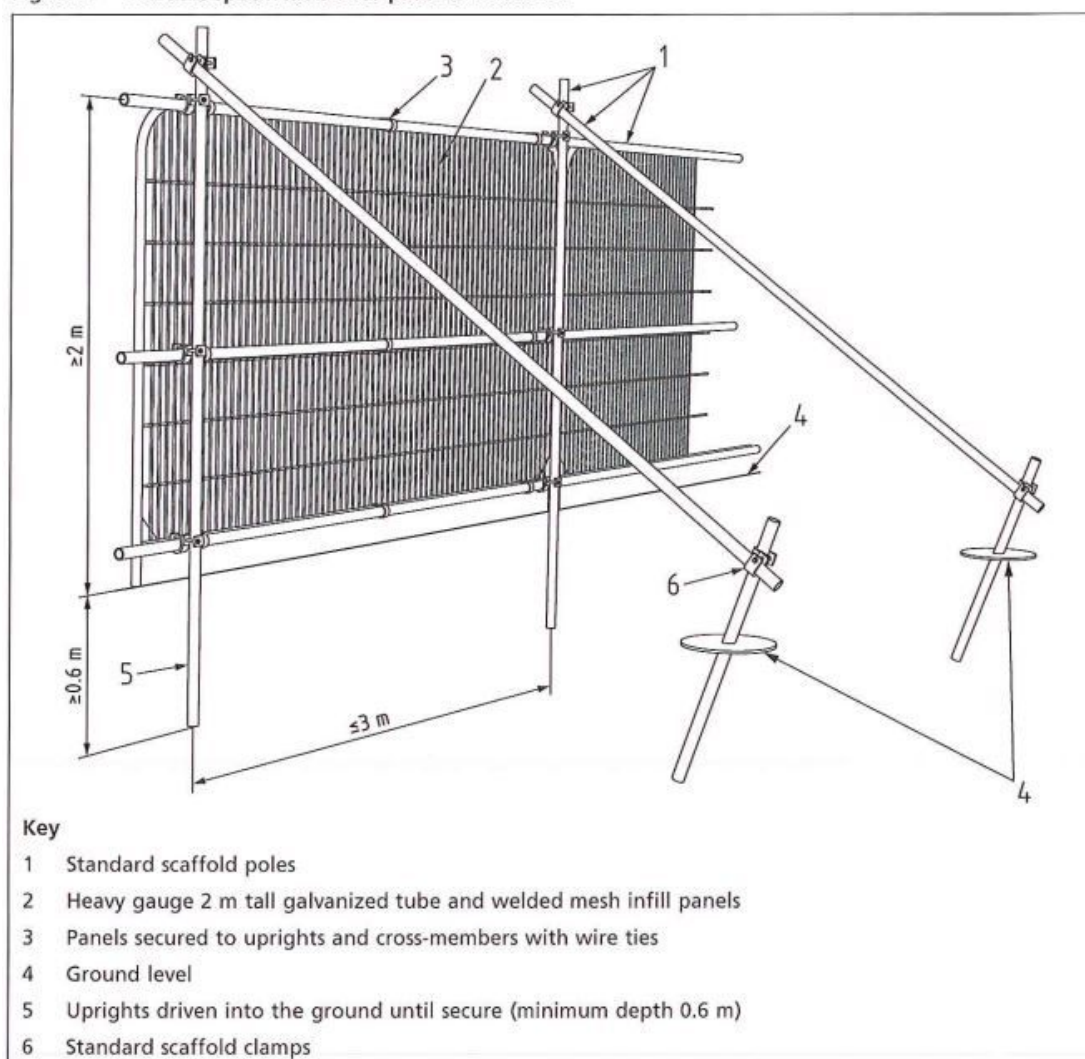


Figure 3 Illustration of Tree Protection Barriers/Fencing

- 10.9 Ground protection is to be used within the Precautionary Area, identified on the TPP, during the construction phase of the

development and will consist of a proprietary system such as Ground Guard protective plates which must extend over the entire PA indicated on the TPP and be securely fastened in place. The type of guard used must be suitable for loads up to 20 tonnes or more.

- 10.10 The protective fencing and ground protection must be inspected on installation and will remain in place until completion of the construction phase and then only removed with the consent of the LPA.
- 10.11 Other than works approved in writing by the LPA, no works including storage or dumping of materials shall take place within the exclusion zones defined by the protective fencing.

General Precautions

- 10.12 No materials that are likely to have an adverse effect on tree health such as oil, bitumen or cement will be stored or discharged within 10m of the trunk of a tree that is to be retained or within any part of the CEZ. Spills kits, suitable for the type fluids, fuels and chemicals stored on site must be available on site and site operatives must have training in their use.
- 10.13 No fires will be lit within 20m of the trunk of any tree that is to be retained.
- 10.14 Storage and mixing areas, contactor parking and all site huts must be outside the CEZ.
- 10.15 Access to the work area is via the main site entrance and must not traverse the CEZ.
- 10.16 All service and drainage routes, below or above ground must avoid the CEZ. All services are to be installed in accordance with NJUG volume 4 Guidelines.

Working within Precautionary Area

- 10.17 This section sets out the specific requirements when working within the Precautionary Area as indicated on PTC/TPP/OL/02/22. A pre-commencement meeting is to take place between site operatives and an arboriculturist from Shields Arboricultural Consultancy. This meeting will discuss the tree protection requirements.
- 10.18 Ground protection must be installed across the PA during all operations to construct the dwelling. This ground protection must be retained in position unless it is removed to facilitate the installation of the access driveway as detailed below,

Construction of Access Driveway

- 10.19 The access drive is constructed on top of the existing ground, once the turf layer has been removed, which should be done using hand tools, under the supervision of the arboriculturalist. Where high points exist, these should be reduced by spreading sand over the area on top of the are to provide an even surface.

- 10.20 Once an even surface has been achieved the 3-dimensional CCS is to be installed in accordance with the manufacturer's instructions. This will require a layer porous of geo-textile (Geosynthetics Treetex) to be placed over the area beneath the CCS. On to this is laid the 3-dimensional CCS grid, which is pegged into place using proprietary pegs. The cells are then filled using 4/20 mm clean angular stone, of neutral pH, with no fines. This should occur from the outside edge working in and the charged cells used as a working platform. A second layer of geo-textile is then laid and the topped with the finished surface material. The geo grid structure and surface layer are retained and edged using treated timber edging held in place by short wooden stakes. The edges can then be incorporated into the existing landscaped as required.
- 10.21 To ensure that all tree protection measures are properly installed and maintained the site shall be monitored by Shields Arboricultural Consultancy to the following schedule. Details of the findings and photographic evidence of the site inspection visits will be reported to the LPA by email within 24 hrs of the visit. All tree protection measures must remain in place until development work is completed and only removed after receiving written confirmation from the LPA.

Schedule of Inspection

1. On completion of erection of fencing and installation of ground protection prior to commencement of development works
 2. During installation of driveway
 3. Monthly throughout the project
- 10.22 Prior to the commencement on site of any work, a competent person is to be appointed to monitor the day to day activities on site. In the case of a tree being damaged or where an unexpected event arises it will be for this person to contact Shields Arboricultural Consultancy to seek advice on contingency measures.

Conclusion

- 11.1 Providing the recommendations of this report are followed, the loss of low value trees and hedgerows on this site would have a very low impact on public amenity and could be mitigated through new planting. The proposed development can be undertaken with minimum impact to the existing arboricultural environment.

S.J.A. Shields

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M.Arbor.A, MICFor.

Chartered Forester

16th February 2022

Arboricultural Assessment

Ref. No.	Species	Top Height	Stem Dia mm	N	E	S	W	CC	Age	Rem Cont.	Cat.	RPA m ²	Notes	AIA
H1	Ilex aquifolium (Holly)	1.2	50	2	2	2	2	0	M	20+	C1	1	Condition: Fair Notes: Well-maintained garden hedge, significant ivy growth.	Attractive boundary feature but with limited public amenity value. Will be retained and protected to the required standard through construction phase of development.
T2	Ilex aquifolium (Holly)	7	250 220	4.3	3.6	2.6	3.9	1.5	M	20+	C2	50	Condition: Good Notes:	Minor specimen not significant in the amenity of the wider area. On adjacent land retained as garden. Will be retained and protected to the required standard through construction phase of development.
T3	Ailanthus altissima (Tree of Heaven)	14	660	6.2	6.8	6.8	5.6	4.5	M	20+	B2	197	Condition: Fair	Reasonably significant in the amenity of the

													Notes: Evidence of past branch failure in crow.	site but with less impact on wider area. On adjacent land retained as garden. Will be retained and protected to the required standard through construction phase of development.
T4	Pyrus (Pear)	6	450	3.6	2.9	4.3	4	1	OM	10+	C1	92	Condition: Fair Notes: Beginning to decline.	Minor specimen not significant in the amenity of the wider area. On adjacent land retained as garden. Will be retained and protected to the required standard through construction phase of development.
T5	Pyrus (Pear)	10	500	3.9	4.4	4.1	3	1.5	OM	10+	C1	113	Condition: Fair Notes:	Minor specimen not particularly significant in the amenity of the wider area. Access drive and parking area

														within RPA. Could be retained if no dig construction method used, however it may be considered preferable to remove and replace tree.
H6	X Cupressocyparis leylandii (Leyland Cypress)	2.5	150	2	2	2	2	0	M	40+	C1	10	Condition: Good Notes:	Internal garden hedge with little amenity value. Would be removed to facilitate development.
T7	Betula pendula (Silver Birch)	10	190 210	2.9	3.9	3.7	3	1.5	M	20+	C2	36	Condition: Good Notes:	Minor specimen not particularly significant in the amenity of the wider area but would provide some maturity to site landscaping. Ver minor encroachment into RPA by patio. Unlikely to impact tree. Will be retained and protected to the required standard through

														construction phase of development.
H8	Crataegus monogyna (Hawthorn)	1.5	50	2	2	2	2	0	M	20+	C2	1	Condition: Good Notes: Well-maintained garden hedge, significant ivy growth.	Attractive boundary feature but with limited public amenity value. Will be retained and protected to the required standard through construction phase of development.
G9	Prunus domestica (Damson), Pyrus (Pear)	5	340	3	3	3	3	2	OM	<10	U	52	Condition: Fair / Poor Notes: Old fruit trees, have been heavily pruned in the past, some decay present in stems and branches.	Group has very limited life expectancy and its removal is recommended.
T10	Prunus sp.	7	380	2.7	3.6	3.4	3.1	2	M	10+	C1	65	Condition: Good Notes:	Minor specimen, part of background landscape, not significant in the amenity of the wider area. Would be removed to

														facilitate development.
T11	Pyrus (Pear)	9	200 320	3.2	2	4.2	3.3	2	OM	<10	U	64	Condition: Poor Notes: Old fruit tree, has been heavily pruned in past. There is evidence of decay in the branches.	Tree has limited life expectancy. Would be removed to facilitate development.
H12	Prunus laurocerasus (Cherry Laurel)	3.5	100	2	2	2	2	0	M	20+	C2	5	Condition: Fair Notes:	Minor feature of background landscape, not significant in the amenity of the wider area. Would be removed to facilitate development.
G13	Pyrus (Pear)	10	280	4	4	4	4.1	2	OM	10+	C2	35	Condition: Good Notes:	Reasonably significant tree, although mainly in terms of internal site amenity. Provides some screening between site and adjacent garden.
T14	Pyrus (Pear)	6	220	2.8	3	2.9	2.7	2	EM	20+	C1	22	Condition: Good Notes:	Minor specimen not significant in the amenity of

														the wider area. On adjacent land retained as garden. Will be retained and protected to the required standard through construction phase of development.
G15	X Cupressocyparis leylandii (Leyland Cypress)	4	100	2	2	2	2	0	M	10+	C1	5	Condition: Good Notes:	Minor specimen not significant in the amenity of the wider area. On adjacent land retained as garden. Will be retained and protected to the required standard through construction phase of development.
G16	X Cupressocyparis leylandii (Leyland Cypress)	4	100	2	2	2	2	0	M	10+	C1	5	Condition: Good Notes:	Minor specimen not significant in the amenity of the wider area. On adjacent land retained as garden. Will be retained and protected to the

															required standard through construction phase of development.
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Ultimate Heights of Main Species

Tree of Heaven 20

Birch 17

Pear 10

Notes

BS 5837: 2012 provides the framework through which tree can be categorised in terms of their health, amenity value and long-term viability for retention on a development site. There are four categories, A,B,C & U.

Category A: Trees of high quality with an estimated life expectancy of at least 40 years.

- 1 Trees that are particularly good examples of their species, or essential components of groups or formal arboricultural features.
- 2 Trees, groups or woodlands that provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance.
- 3 Trees, groups or woodlands of significant conservation, historical, commemorative or other value.

Category B: Trees of moderate quality with an estimated lifespan of at least 20 years

- 1 Trees that might be included in a higher category but are downgraded because of impaired condition.
- 2 Trees present in numbers, usually as groups of woodlands that form distinctive landscape features.
- 3 Trees with clearly identifiable conservation or other cultural benefits.

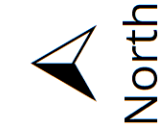
Category C: Trees of low quality with an estimated lifespan of at least 10 years or young trees with a stem diameter below 150mm.

Category U: Trees in such a condition that they cannot realistically be retained as living in the context of the current land use for longer than 10 years. *NB. Category U trees can have an existing of potential conservation value which it might be desirable to preserve.*

Bat potential has been assessed in accordance with the guidance provided in BS 8596:2015 and is at the level of a non-specialist scoping survey. This assessment is for preliminary advice and does not negate the requirement for a specialist ecological survey

Key

Tag No	Identification number for tree	Species	Species of tree
Top Height	Estimated height of tree	Stem Dia.	Diameter of stem at 1.5 metres
Stems	Number of stems	N, E, S, W	Crown spread at compass points
CC	Crown Clearance	FSB	Direction of first significant branch
Rem. Cont	Remaining safe life expectancy in years	RPA	Root protection area in m ²
Cat.	BS Category (see above)	AIA	Arboricultural Implication Assessment
Age	Y - Young Trees SM Semi Mature EM Early Mature M Mature LM Late Mature exceeds normal life expectancy for species VET Veteran Tree		
Condition	Good Relatively free from defects and / or major pests and diseases Fair Some defects, which could be addressed through tree surgery or minor pests or early symptoms of diseases Poor Substantial defects or terminal decline Dead Dead		



Tree Constraints Plan

Pear Tree Cottage
Frog Lane
Holt
Wrexham

Key

Cat B Tree

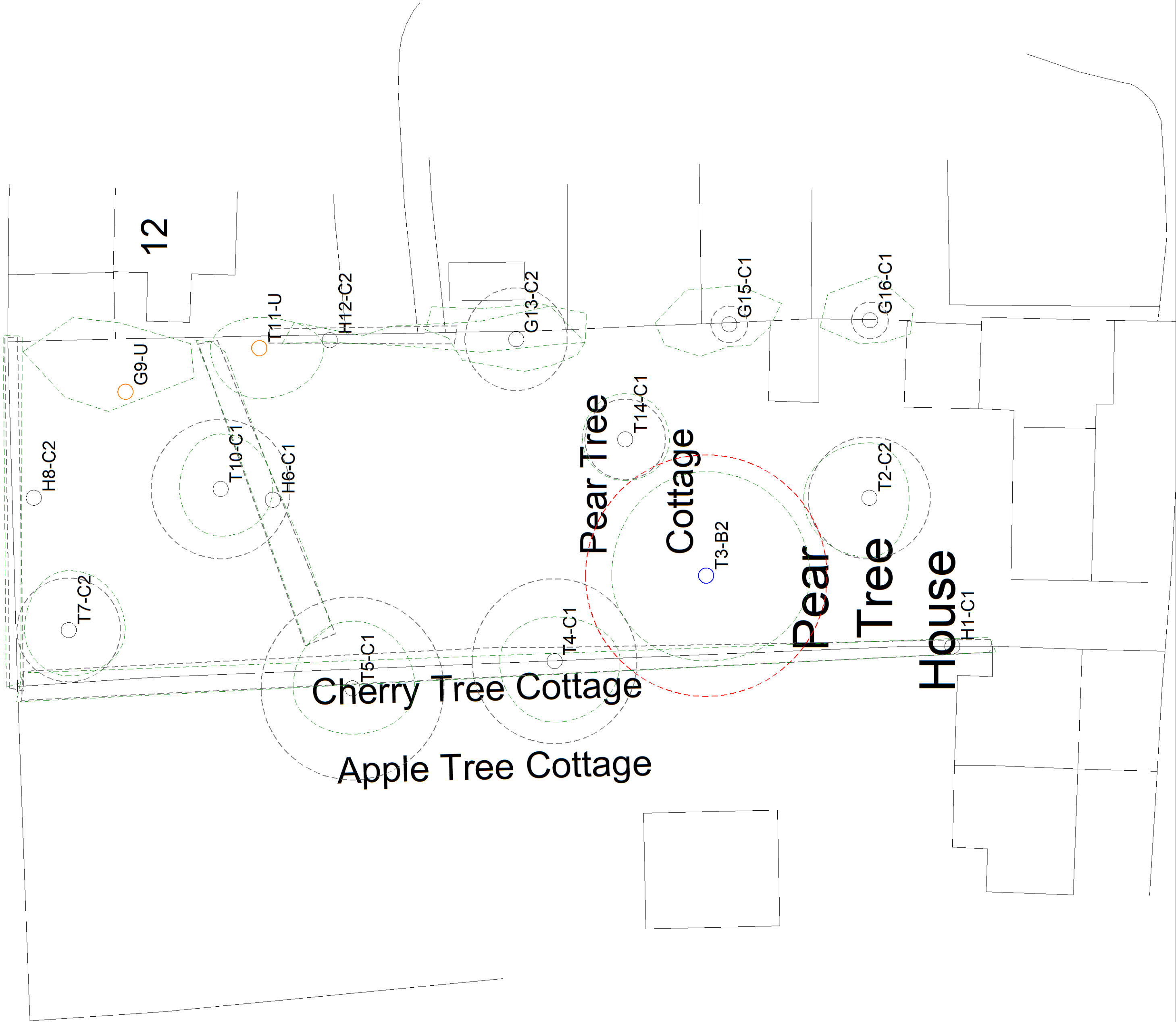
Cat C Tree

Cat U Tree

Canopy

RPA

RPA Cat C



Drawing No: PTC/TCP/02/22

Drawn By: S. Shields

Scale: 1:200 @ A2

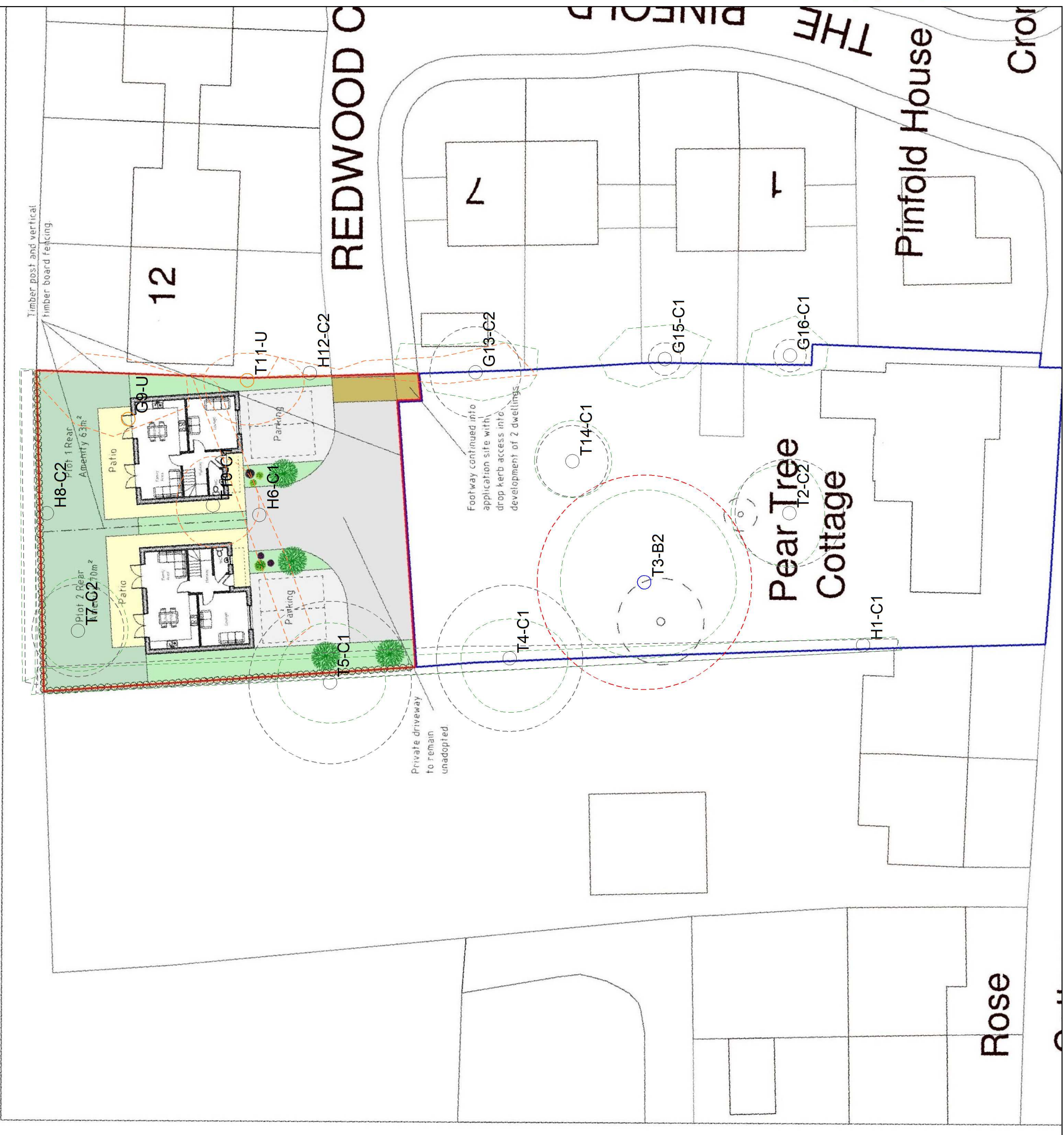
Date: 14th February 2022

Revision:

Do not scale from this drawing all dimensions to be checked on site

Drawing is colour coded and a monochrome copy should not be relied upon

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Tree Protection Plan
Overlay
Pear Tree Cottage
Frog Lane
Holt
Wrexham

Cat B Tree

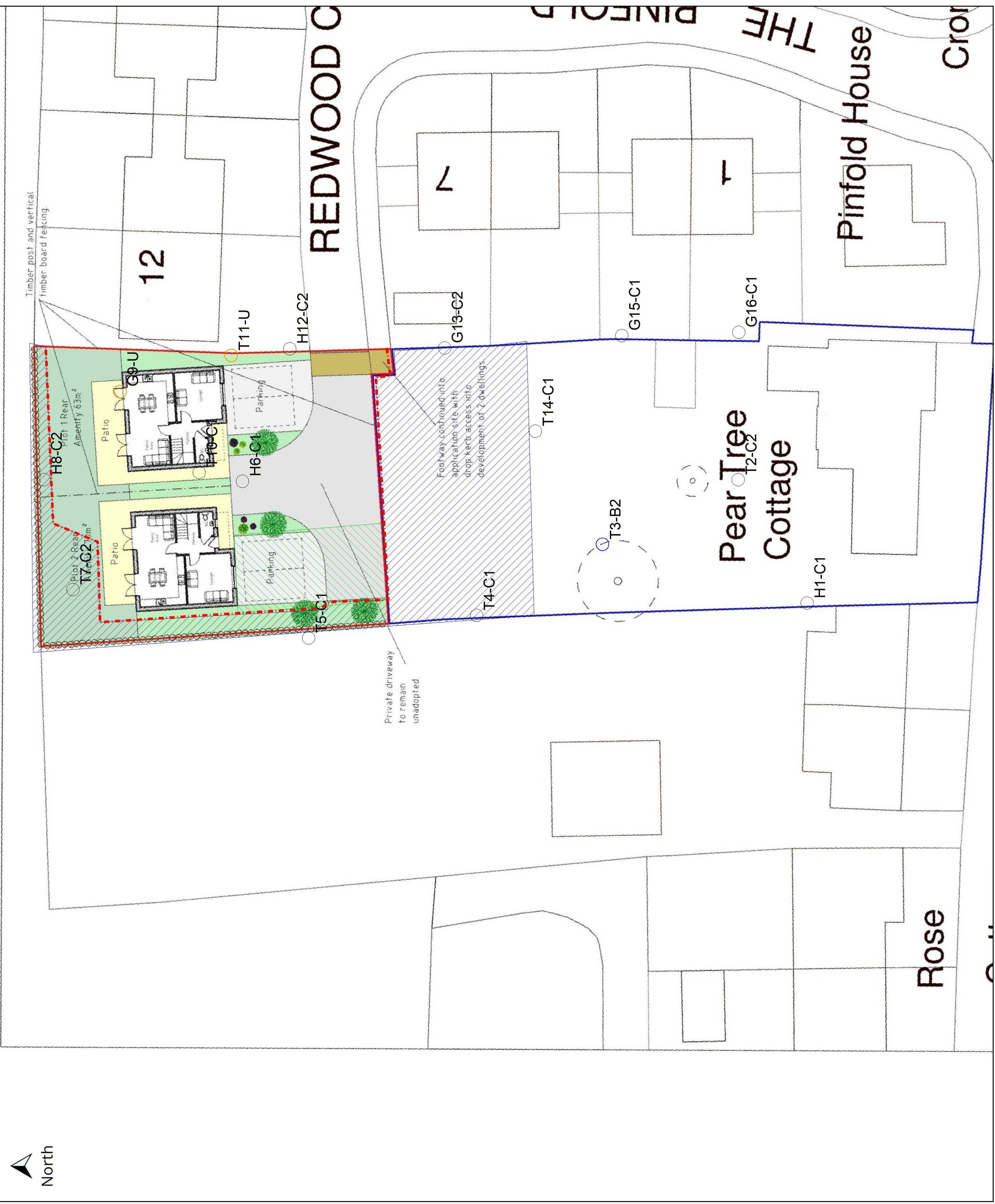
Cat C Tree

Cat U Tree

CEZ

Precautionary Area

Tree Protection Fencing



Drawing No: PTC/TPP/OL/02/22
Drawn By: S. Shields
Scale: 1:200 @ A2
Date: 16th February 2022
Revision:
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