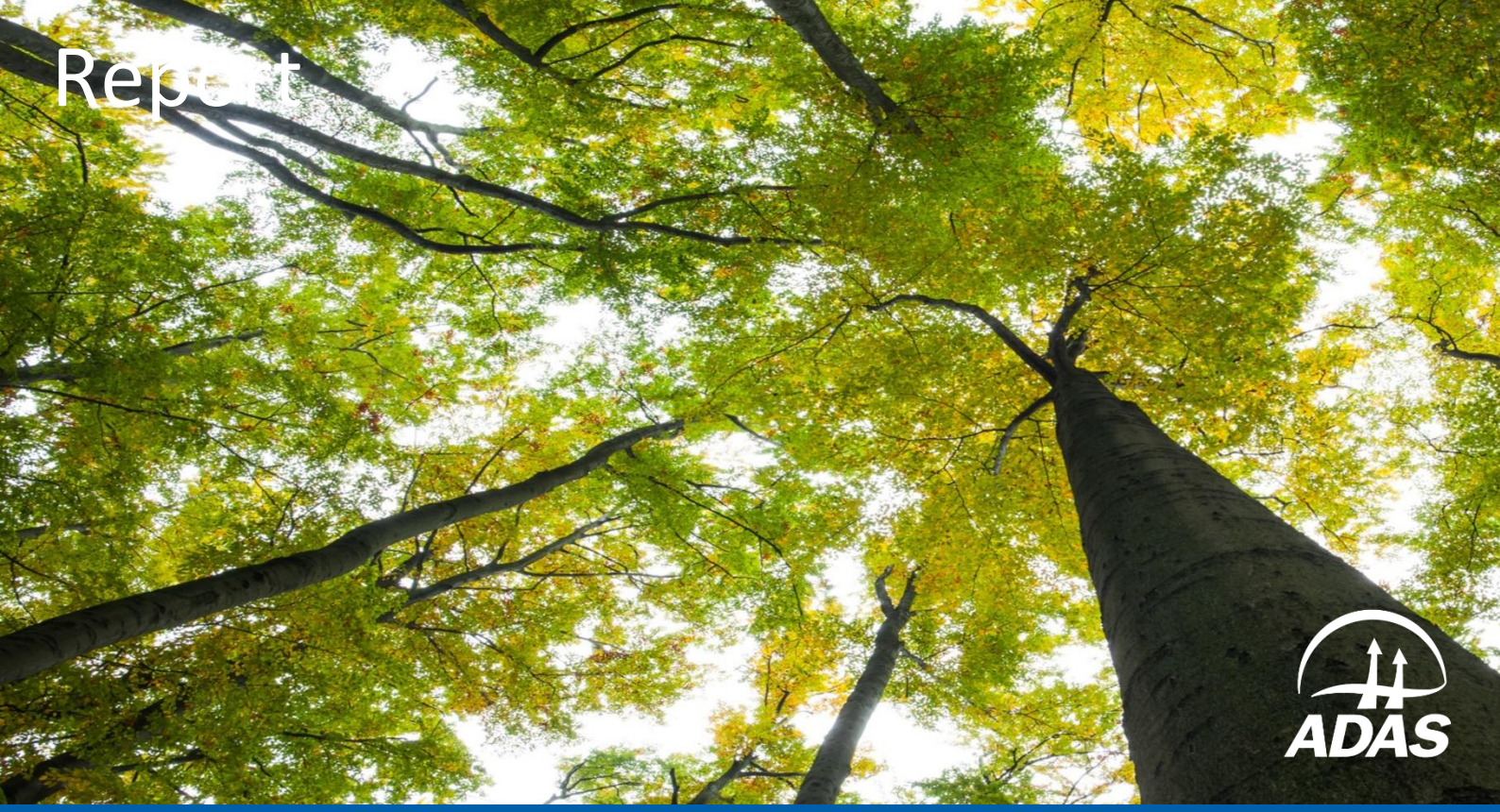
Report



Arboricultural Impact Assessment

Pen Yr Englyn

Date: August 2025

ADAS Reference: 1052590

Submitted to:

Binnies

Prepared by:

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Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

This work has been undertaken in accordance with the quality management system of ADAS.

Revision History

Revision	Date	Amendment
-	November 2024	Initial Report
Rev A	December 2024	Report Amendments
Rev B	August 2025	Amended Proposal

1 Executive Summary

ADAS was instructed by Binnies, on behalf of Natural Resources Wales (NRW), to provide arboricultural support in respect of a proposed tip remediation scheme to ensure slope stability on land at Pen Yr Englyn, Treorchy.

The purpose of this document is to identify the potential arboricultural impacts associated with the proposed remediation scheme and advise on measures for mitigating and minimising any such impact.

To inform the production of this report an ADAS Arboricultural Consultant conducted a tree survey of the site at Pen Yr Englyn in August 2024, with an additional visit to verify the original survey data undertaken in July 2025.

The tree survey identified a total of 85 arboricultural features comprising 66 individual trees, 18 groups of trees and one area of woodland

Of the features surveyed, 60 were identified as moderate quality category B specimens, and 19 were identified as being low quality category C specimens. In addition, six features were assessed as being category U specimens. No trees of a high quality category A were recorded.

The works proposed within the site are the installation of new drainage measures to improve slope stability and reduce the risk of land slip occurring.

Overall, it is anticipated that the removal of 12 individual trees will be required to implement the development. In addition, the partial removal of five tree groups will be necessary. Overall the vegetation removal proposed will result in the loss of approximately 1304m^2 of canopy cover from within woodland areas and the loss of approximately 493m^2 of scrub vegetation outside of woodland areas.

In addition to the proposed tree removal vegetation management works, to comprise pruning and coppicing of trees, will be undertaken within five tree groups and to four individual trees. These works are proposed to provide adequate access to the existing watercourse to remove debris and bracken from the channel and ensure it is free flowing. The final extent of any pruning and coppicing works within the identified zones will be determined by the appointed arboricultural consultant on site. The final confirmation of the tree pruning and coppicing works undertaken will be sent to Rhondda Cynon Taf Council after.

It is not considered that the tree removal proposed will have a significant arboricultural impact, as trees to be removed are typically contained within group features that are to be substantially retained, and it can be adequately mitigated by replacement planting undertaken as part of the development.

During the implementation phases of the proposed development, precautions will need to be taken to ensure that the retained trees can be successfully protected whilst works are completed.

2 Introduction

2.1 The Author

This document has been prepared by Edmund Lusk, an ADAS Principal Arboricultural Consultant. Edmund is a Professional Member of the Arboricultural Association, a Professional Member of the Consulting Arborist Society and holds the Higher National Diploma in Arboriculture. Edmund has 22 years of experience within the arboricultural industry, both in the Public Sector as a Tree Officer and in the Private Sector as an Arboricultural Consultant.

2.2 Client Instruction

ADAS was instructed by Binnies, on behalf of Natural Resources Wales, to provide arboricultural support in respect of a proposed tip remediation scheme to ensure slope stability on land at Pen Yr Englyn, Treorchy.

2.3 Purpose of Report

The purpose of this Arboricultural Impact Assessment report is to:

- Record the current condition of the trees found on the site and categorise them using criteria outlined in British Standard 5837 (2012) 'Trees in relation to design, demolition and construction – Recommendations' (BS5837:2012).
- Provide a Tree Constraints Plan that identifies any constraints to development presented by the trees, to include root protection areas for the retained trees as described in BS5837:2012.
- Provide guidance detailing arboricultural constraints to development and factors to be considered during the construction phase of the development.
- Detail the impact that the proposed development shown on the indicative masterplan will have upon the site's existing tree stock and set out recommendations for the subsequent mitigation or avoidance of impact during detailed design of the development layout.

In line with the sequence of events set out in Figure 1 of BS5837:2012, which is contained in **Appendix 1**, this report is intended as a reference to be used to inform and contribute to the design process, and does not, in itself, provide sufficient information to be used as an Arboricultural Method Statement during the development works.

2.4 Site Description

The site under consideration within this report is land located east of Corbett Street and Herbert Street in Pen Yr Englyn, Treorchy in which works to trees is anticipated to be required. The site boundary is shown within the Tree Constraints Plan (TCP) contained in **Appendix 2**.

The site comprises an area of hillside which has largely been utilised for commercial forestry which has been previously clear-felled. The trees surveyed are predominately in the southern section of the site at the base of the hill and they form a cohesive 'wooded' area which is bisected by a forestry access track.

2.5 Description of Proposed Development

The proposed development involves the construction and operation of a drainage system at the former Ynysfeio Colliery Spoil tip, located in Pen Yr Englyn to the east of Herbert Steet. The works include:

- regrading and reprofiling of 260m length of forest road and provision of a bund of approximately 0.3m height on the south of the forest road,
- replacement of an existing concrete lined drainage ditch of 210m,
- inspection and like for like replacement of two culverts (of 7m and 10m in length) beneath the forest road in the north of the site,
- installation of 81 subsurface drains with a maximum length of 25m,
- installation of two new drainage ditches totalling 185m in length (80m and 105m),
- installation of three new blockstone cascades totalling 280m in length (115m, 125m and 40m),
- installation of four lateral gravel drains totalling 225m (70m, 65m, 50m and 40m) connecting into a blockstone cascade.
- thinning of vegetation on the existing watercourses and implementation of nature-based solutions within the existing watercourse alignment to manage flow conditions,
- regrading 420m of forest track and provision of a bund of 0.3m height on the downslope side of the forest track,
- installation of 425m of filter drains adjacent to forest tracks,
- vegetation management to facilitate the works, and targeted replacement planting.

3 Methodology

3.1 Tree Survey Methodology

An initial tree survey, to establish the tree constraints on the site, was carried out by Ed Lusk, an ADAS Principal Arboricultural Consultant, on the 15th and 16th August 2024. An additional survey, to review and verify the existing tree data, was undertaken on 22nd July 2025.

The tree survey was carried out in accordance with the recommendations contained within BS5837:2012.

All trees have been visually inspected from ground level unless otherwise stated, with no climbing or boring tests being undertaken. The comments made on their condition are based on observable factors present at the time of inspection.

Many of the trees within the site had been tagged in an earlier survey undertaken by Binnies ecology consultants. These tagged trees have been recorded based on observed tag number. All other individual trees and groups of trees have been given a unique reference number.

In line with the recommendations contained within Table 1 of BS5837:2012, which is contained in **Appendix 3,** each tree was assessed and assigned to one of the following categories:

- Category A: Those trees of high quality and value with an estimated remaining life expectancy of at least 40 years.
- Category B: Those trees of moderate quality and value with an estimated remaining life expectancy of at least 20 years.
- Category C: Those trees of low quality and value with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter below 150 mm.
- 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.

Categories A, B and C have further sub-categories with regards to the reasons for tree retention:

1: Mainly arboricultural qualities

2: Mainly landscape qualities

3: Mainly cultural values, including conservation.

The information, shown in **Table 1** below, was recorded as part of the tree survey.

Table 1: Tree Survey Schedule heading descriptions

Column Heading	Description
Tree Ref No.	Tagged trees have been recorded based on observed tag number (i.e. 3543). Where recorded within groups tagged trees have been prefixed with a G (i.e. G3579). All other individual trees and groups of trees have been given a unique reference number. Each number is prefixed by a letter. ▪ T = Individual tree ▪ G = Group of trees
Species	The English common name has been used, with the scientific name in brackets.
Single or Multiple stem (S or M)	▪ 'S' represents a tree which has a single clear stem to at least 1.5m above ground level. ▪ 'M(a)' represents a tree where the main stem divides into two to five stems below 1.5m above ground level, and ▪ 'M(b)' represents a tree where the main stem divides into 6 or more stems below a height of 1.5m.
Height (m)	Where possible tree heights are measured using a laser. In some instances, such as in close groups of trees, one height may be measured, and other nearby trees estimated from this height. Measurements are provided in metres.
Stem Diameter (mm)	S_n represents the stem number. Measurements are provided in millimetres at 1.5m above ground level for single stemmed trees.
Very Large Girth (y/n)	Girth is very large for species in accordance with Fig 1.3 of publication 'Ancient and other veteran trees: further guidance on management' Ancient Tree Forum 2013.
Ancient (A), Veteran (V) or Notable (N)	Result of the RAVEN 2 assessment © Julian Forbes-Laird 2023 www.flac.uk.com. (RAVEN = Recognition of Ancient, Veteran & Notable Trees)
Branch Spread (m)	Measured in metres to the four cardinal compass points (N, E, S, W).
Crown Clearance	(1) Height in metres of the first significant branch, and the direction of growth. (2) Height in metres of lowest part of crown.
Life Stage	The stage at which the tree is within its lifecycle (Y = young, SM = semi-mature, EM = early mature, M = mature, OM = over mature)
General Observations	Any relevant observations are recorded, with particular reference to structural and/or physiological condition.
Preliminary Management Recommendations	Recommendations are made where management work is required for reasons of health and safety or sound arboricultural management.
Estimated Remaining Contribution (years)	An estimation of how long the feature will contribute to its surroundings. This is recorded in bands of either <10 years, 10+ years, 20+ years and 40+ years.
Tree Quality Grading	The trees are graded to the categories prescribed within BS5837:2012 (U, A, B & C).

Column Heading	Description
Root Protection Area	Calculated as prescribed in section 4.6 of BS5837:2012, provided as an area (m^2) and a radius from the tree's stem (m).
Note: Those measurements shown in *italics* have been estimated, usually where access has restricted it being taken.	

3.2 Root Protection Area

The Root Protection Area (RPA) has been calculated for each of the Category A, B and C trees. This is a minimum area around a tree which is deemed to contain a sufficient number of roots, and rooting volume, to maintain a tree's viability.

These figures have been calculated utilising the formulas within Section 4.6 and Annex D of BS5837:2012.

Further details of RPAs are provided in **Appendix 4**.

3.3 Ancient and Veteran Tree Identification

As part of the tree survey an assessment was undertaken to establish if any of the trees surveyed are likely to be ancient, veteran or locally notable. This assessment was completed using the second edition, known as RAVEN 2, of the Recognition of Ancient, Veteran and Notable Trees (RAVEN) methodology published by Julian Forbes-Laird.

The author has developed RAVEN 2 to be consistent with the definition of veteran trees in the National Planning Policy Framework (NPPF) and it is only intended to be used within this planning context. Planning Policy Wales (PPW) does not include a glossary definition of a veteran tree and for the purposes of this assessment that included within the NPPF is considered to be relevant.

The initial stage of assessment is to determine if the surveyed tree is old relative to others of the same species, this is assessed using the Forestry Commission Information Note 'Estimating the Age of Large and Veteran Trees in Britain' authored by John White. For the tree to be considered further within the process as a potential veteran it must have an age equivalent to a minimum of 25% of the species maximum.

The second step, assuming the tree qualifies on the basis of age, is determining if the tree has a very large girth for the species, with this being assessed with reference to a chart of girth in relation to age and developmental classification of trees contained as Figure 1.3 in the Ancient Tree Forum publication "Ancient and other veteran trees: further guidance on management" edited by David Lonsdale.

If a tree has been identified as being old relative to others of the same species and as having a very large girth for the species two further assessment steps are undertaken to classify the tree as either Ancient, Veteran or Notable.

These steps are the assessment of additional primary features that would indicate veteran or ancient status, and the assessment of secondary features that would indicate the same. A veteran tree should normally exhibit at least two additional primary feature or, if no primary features are evident, at least six secondary features. Where one primary feature is recorded a veteran tree should exhibit three secondary features to qualify.

The final determination of if a tree is ancient, veteran or notable is then made on the basis of this assessment; with ancient trees being those exhibiting the necessary primary or secondary features and being at least >50% of estimated species age maximum, and veteran trees being those exhibiting the necessary primary or secondary features and being at least 25% of estimated species age maximum. Notable trees are those which are approaching veteran status under steps one or two but do not qualify based upon the assessment of primary or secondary features.

3.4 Assumptions and Limitations

This assessment is based upon the information provided by the client in addition to information collected by ADAS during surveys of the site undertaken in August 2024. The documents and drawings considered are detailed within **Table 2**.

Table 2: Documents and Drawings Considered

Author	Document Title	Drawing No.	Date
Binnies	General Arrangement	ACAD-4021526-BUK-ZZ-00-M3-C-00005 export 170725	July 2025

The Tree Constraints Plan contained in **Appendix 2** has been developed from the tree survey information with reference to an Ordnance Survey Base Map.

Tree locations were determined on site using digital survey software and hardware using a combination of aerial imagery and the hardware's inbuilt Global Positioning System (GPS). Trees plotted with the internal GPS can be assumed to have an accuracy of +/- 5 m.

The Arboricultural Impact Assessment section of this report has been developed with reference to the information detailed in **Table 2** and assumes that the layout shown on the Arboricultural Impact Assessment Plan (**Appendix 5**), is the final layout.

This report is only intended for use by the person(s) or company named on the front cover.

This report is not a full hazard or risk assessment of trees and should not be used as such.

Trees are living organisms and are constantly adapting to their ever-changing environment. No tree is completely safe and there is no guarantee that problems or deficiencies may not arise in the future, which

have not been identified in this report. Therefore, it is recommended that the trees are reviewed annually to identify any changes to their condition and growing environment.

4 Desktop Constraints Analysis

4.1 Planning Policy

4.1.1 National Policy

Guidance within the Planning Policy Wales (PPW) states that:

"*Ancient woodland, semi-natural woodlands, individual ancient, veteran and heritage trees and ancient hedgerows are irreplaceable natural resources, and have significant landscape, biodiversity and cultural value. Such trees, woodlands and hedgerows are to be afforded protection from development which would result in their loss or deterioration unless very exceptionally there are significant and clearly defined public benefits; this protection must 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, work to improve its completeness and use it to ensure the protection of trees and woodland and identify opportunities for more planting as part of the Green Infrastructure Assessment, particularly in terms of canopy cover.*"

This policy makes it clear that planning permission should not be granted for proposals which result in the loss or deterioration of ancient woodland or the loss of aged or veteran trees outside of ancient woodland except in exceptional circumstances.

Standing advice published by Natural Resources Wales provides recommendations for stand-off or protection zones required to avoid development impacts to ancient woodland and ancient or veteran trees. In this respect it is recommended:

"*A stand-off or protection zone's purpose is to protect ancient woodland. The size and type of stand-off or protection zone should vary depending on the scale, type and impact of the development.*

The BS 5837 Tree Survey, PEA and/or EcIA assessments should be used to inform the stand-off or protection zone for each individual woodland and veteran and ancient trees. Some zones may only require a root protection area to prevent negative impacts on individual trees or groups of trees, and others are likely to extend further. For example, the effect of air pollution from development that results in a significant increase in traffic or point source. Guidance is available on our Ammonia Assessment pages on the distance required for screening potential effects from ammonia.

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Where possible, a stand-off or protection zone should:

- *contribute to wider ecological networks;*

- *be part of the green infrastructure of the area.*

It should consist of retained semi-natural habitats such as woodland and/or a mix of native scrub, grassland, heathland and wetland.

Developers should consider if public access is appropriate and only allow access on foot to stand-off or protection zones if the habitat is not harmed by trampling.

Developers should avoid including gardens in stand-off or protection zones."

4.1.2 Local Planning Policy

Local planning policy is contained within the Rhondda Cynon Taf Local Development Plan up to 2021 Adopted March 2011. A review of this document has identified Policy AW8 'Protection and Enhancement of the Natural Environment' as being relevant.

Policy AW8 states:

"*Rhondda Cynon Taf's distinctive natural heritage will be preserved and enhanced by protecting it from inappropriate development. Development proposals will only be permitted where:-*

1. They would not cause harm to the features of a Site of Importance for Nature Conservation (SINC) or Regionally Important Geological Site (RIGS) or other locally designated sites, unless it can be demonstrated that:-

a)The proposal is directly necessary for the positive management of the site; or

b)The proposal would not unacceptably impact on the features of the site for which it has been designated; or

c) The development could not reasonably be located elsewhere and the benefits of the proposed development clearly outweigh the nature conservation value of the site.

2. There would be no unacceptable impact upon features of importance to landscape or nature conservation, including ecological networks, the quality of natural resources such as air, water and soil, and the natural drainage of surface water.

All development proposals, including those in built up areas, that may affect protected and priority species will be required to demonstrate what measures are proposed for the protection and management of the species and the mitigation and compensation of potential impacts. Development proposals must be accompanied by appropriate ecological surveys and appraisals, as requested by the Council.

Development proposals that contribute to the management or development of Ecological Networks will be supported."

4.2 Ancient Woodlands and Ancient and Veteran Trees

4.2.1 Ancient Woodlands

Ancient woodlands are areas of land which have been wooded continuously since at least 1600 AD. They include:

- ancient semi-natural woodland (ASNW) mainly made up of trees and shrubs native to the site, usually arising from natural regeneration.
- plantations on ancient woodland sites (PAWS) - replanted with conifer or broadleaved trees that retain ancient woodland features, such as undisturbed soil, ground flora and fungi.

A search undertaken using Data Map Wales has established that whilst none of the trees within the site are within an Ancient Woodland, a Plantation on Ancient Woodland Site (PAWS) is located east of the site.

The results of this search are provided at **Appendix 6**.

4.2.2 Ancient and Veteran Trees

Ancient and veteran trees can be individual trees or groups of trees within wood pastures, historic parkland, hedgerows, orchards, parks or other areas. They are often found outside ancient woodlands.

Ancient trees

An ancient tree is exceptionally valuable. Attributes can include its: great age, size, condition, biodiversity value as a result of significant wood decay and the habitat created from the ageing process, cultural and heritage value. Very few trees of any species become ancient.

Veteran trees

A veteran tree may not be very old, but it has significant decay features, such as branch death and hollowing. These features contribute to its exceptional biodiversity, cultural and heritage value.

All ancient trees are veteran trees, but not all veteran trees are ancient. The age at which a tree becomes ancient or veteran will vary by species because each species ages at a different rate.

A search undertaken using the Ancient Tree Inventory (ATI) Map published by the Woodland Trust did not indicate the presence of any Ancient or Veteran trees in proximity of the site. A copy of the search plan is contained as **Appendix 7.**

It is noted that the ATI provides only a snapshot view of the presence of Ancient and Veteran trees based upon records submitted by local recorders and it is not a comprehensive data set that can be used to confirm or exclude the presence of Ancient or Veteran trees within a site.

As such, in addition to the desktop analysis, the on-site survey included an assessment of potential ancient and veteran trees, as detailed in Section 3.3. The results of this assessment are provided in **Section 5**.

4.3 Tree Preservation Orders and Conservation Areas

Local Planning Authorities (LPAs) have the power to preserve selected trees and woodlands through the making of Tree Preservation Orders (TPOs). Similarly, special provision is provided to trees located within Conservation Areas (CAs) which are not the subject of a TPO. The LPAs powers to do this are provided by the following Act of Parliament and its associated regulations:

- Town and Country Planning Act 1990
- Town and Country Planning (Trees) Regulations 1999
- Town and Country Planning (Trees) (Amendment) (Wales) Regulations 2017

The principal effect of a TPO is to prohibit the cutting down, uprooting, topping, lopping, wilful damage or wilful destruction of trees without first obtaining the consent of the relevant Local Authority.

Where works to trees within a CA are proposed, six weeks notification must first be given to the relevant Local Authority.

Unauthorised works to trees either protected by a TPO or those that are located within a CA, could result in an unlimited fine.

A search of Rhondda Cynon Taf Council's interactive mapping has established that the site is not situated within a CA.

Rhondda Cynon Taf Council have confirmed that none of the trees on site are protected by a TPO.

Plans showing the results of the TPO and CA searches are contained as **Appendix 8.**

4.4 Sites of Special Scientific Interest (SSSI)

Sites of Special Scientific Interest (SSSIs) are areas notified under the Wildlife and Countryside Act 1981 as being of special interest for nature conservation or their geology with additional protection afforded to them by the Countryside and Rights of Way Act 2000. Under the legislation Natural England (NE) or Natural Resources Wales (NRW) must be notified of any planned works or operations that could potentially damage an SSSI or its features of interest before they are able to proceed.

A search undertaken using Data Map Wales has established that Mynydd Ty-isaf, Rhondda SSSI is located approximately 880m west of the site at the closest point. A copy of the search plan is provided at **Appendix 9**.

4.5 Felling Permission

The Forestry Act 1967 places controls upon the felling of trees and requires that a felling licence is applied for in advance of undertaking tree felling works, except in certain circumstances. For instance, if less than $5m^3$ of timber is intended to be felled within one calendar quarter, a felling licence would not be required.

Not every tree felling project requires a felling licence. Exemptions can be based on:

- location
- the type of tree work
- the volume and diameter of the tree
- other permissions already in place
- legal and statutory undertakings.

The felling of trees in accordance with permitted development, and which is immediately required for the purpose of carrying out the permitted development, is exempt from the need for a felling licence. Evidence may be requested to show that development is permitted, or that planning permission is deemed to be granted.

Once full planning permission is granted, the felling licence will not be required.

Outline planning permission is not sufficient to demonstrate that the felling of trees is immediately required for the purposes of development; a felling licence will be required in these circumstances.

Where there is any uncertainty over the need for a felling license, advise is to be sought from the appointed Arboricultural Consultant and/or the Natural Resources Wales local Woodland Officer.

Further information regarding the requirements for a felling licence are detailed within the Forestry Commission's publication "Tree felling: Getting permission" updated 2023.

5 Tree Survey Results

5.1 Overview

The findings of the tree survey are contained in the Tree Survey Schedule in **Appendix 10** and should be reviewed in conjunction with the Tree Constraints Plan contained at **Appendix 2**.

The tree survey identified a total of 85 arboricultural features comprising 66 individual trees, 16 groups of trees and one area of woodland.

The vegetation surveyed primarily comprised pioneer species trees and dense areas of scrub vegetation.

In accordance with section 4.5 and Table 1 of BS5837:2012 the existing trees on the site were categorised according to their quality and value as either category U, A, B, or C.

As detailed in **Figure 3** below, of the features surveyed, 60 were identified as moderate quality category B specimens, and 19 features were identified as being low quality category C specimens.

Additionally, six features were identified as being a category U specimens; these are trees which are 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.

None of the trees surveyed were considered to be of a high quality, category A.

The recording of the majority of the trees surveyed as being of a moderate quality, category B, is due to them being present in quantity and the collective benefit they have as groups to the landscape of the site and wider area.

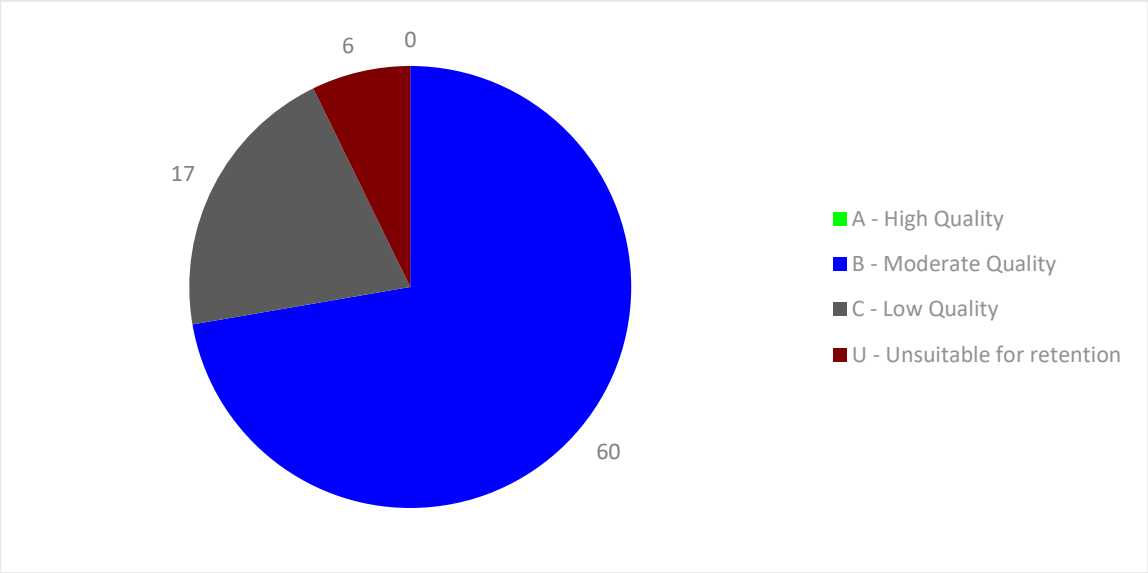


Figure 3: Tree quality grading across the site

5.2 Species

The range of tree species recorded on greater than 10 occasions within the survey is demonstrated in **Figure 4** below, with those tree species recorded on fewer than 10 occasions demonstrated in **Figure 5**.

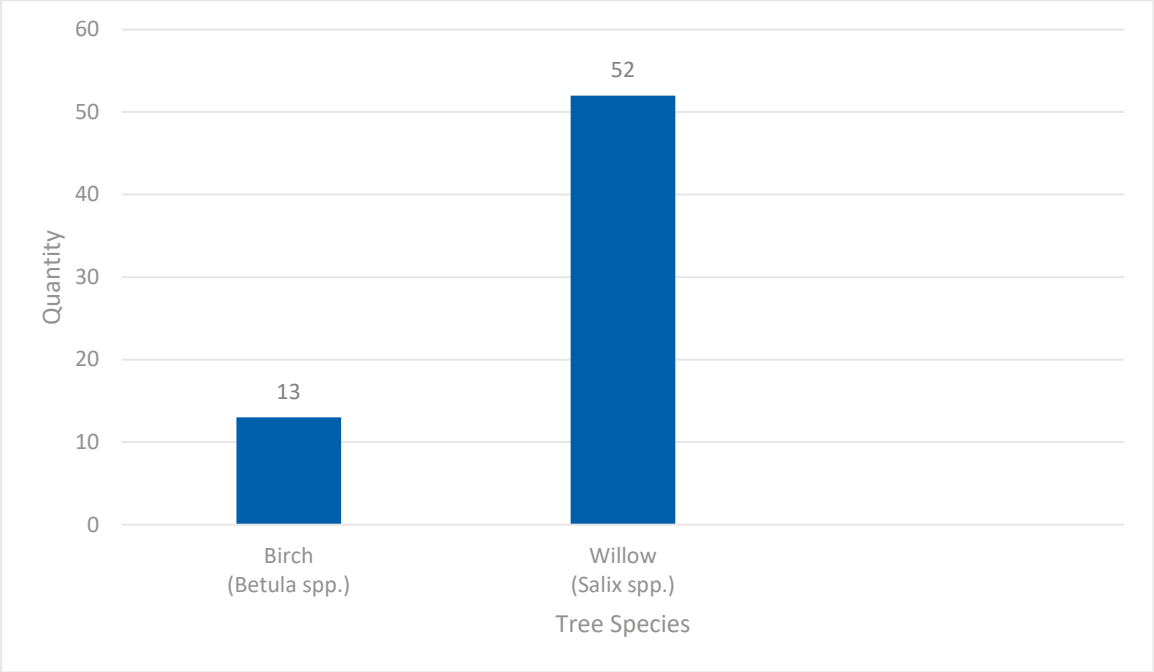


Figure 4: Range of Tree Species on site (Species recorded >10 occasions)

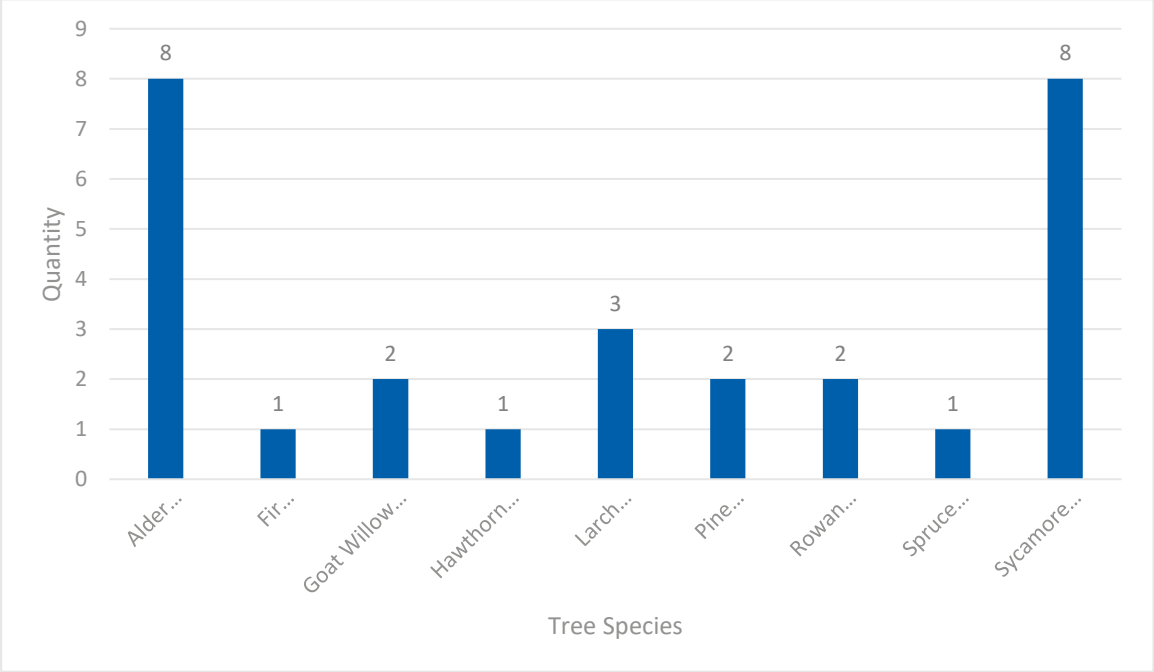


Figure 5: Range of Tree Species on site (Species recorded <10 occasions)

As can be seen from **Figure 4** the most abundant species recorded was willow. The willow (*Salix* spp.) genera is a fast growing primary colonising genus which is typically associated with deep moist soils.

5.3 Life Stages

As demonstrated in **Figure 6** below, the site's tree stock was biased towards trees of an early-mature to mature age class with no trees of a young ages class being recorded.

A review of historic aerial imagery indicates that trees within the eastern section of the site are typically longer established than those within the central and western areas, though scattered trees are evident in imagery from 2001 along the western edge of the site adjacent properties on Corbett Street. It is likely that all tree cover originated following cessation of colliery operations in the 1930's-40's.

As noted in Section 5.2, the species mix on site is dominated by fast growing willow trees which has contributed to the preponderance of trees attaining the early-mature to mature life stage in a relatively short time frame.

Those trees assessed as being young (Y) and semi-mature (SM) in age can generally be considered to have significant growth potential. Whilst these specimens are not likely to make a substantial contribution to the landscape character of the site at present they will, if retained, provide succession for the eventual removal of mature or over-mature trees as a result of declining physiological or structural condition.

Early mature trees (EM) will generally make a contribution to the landscape character and appearance of the site and their retention will provide more immediate succession. These trees will also have significant growth potential.

Mature (M) trees are not considered to have significant future growth potential and have generally reached their maximum expected size for the location. These trees will generally make the highest contribution to the landscape contribution of the site however a tree stock over dominated by mature trees will require careful management to ensure that continuation of canopy cover can be achieved.

Over-mature (OM) trees do not have the potential to increase in size and may in fact reduce in size as their crowns begin to retrench. These trees will often make a significant contribution to the landscape character of the site and are likely to have ecological value. However, the retention of these trees within new development must be carefully planned as they are approaching the end of their useful life expectancy, they will often have structural defects, and are likely to be more sensitive to disturbance / changes to their growing environment.

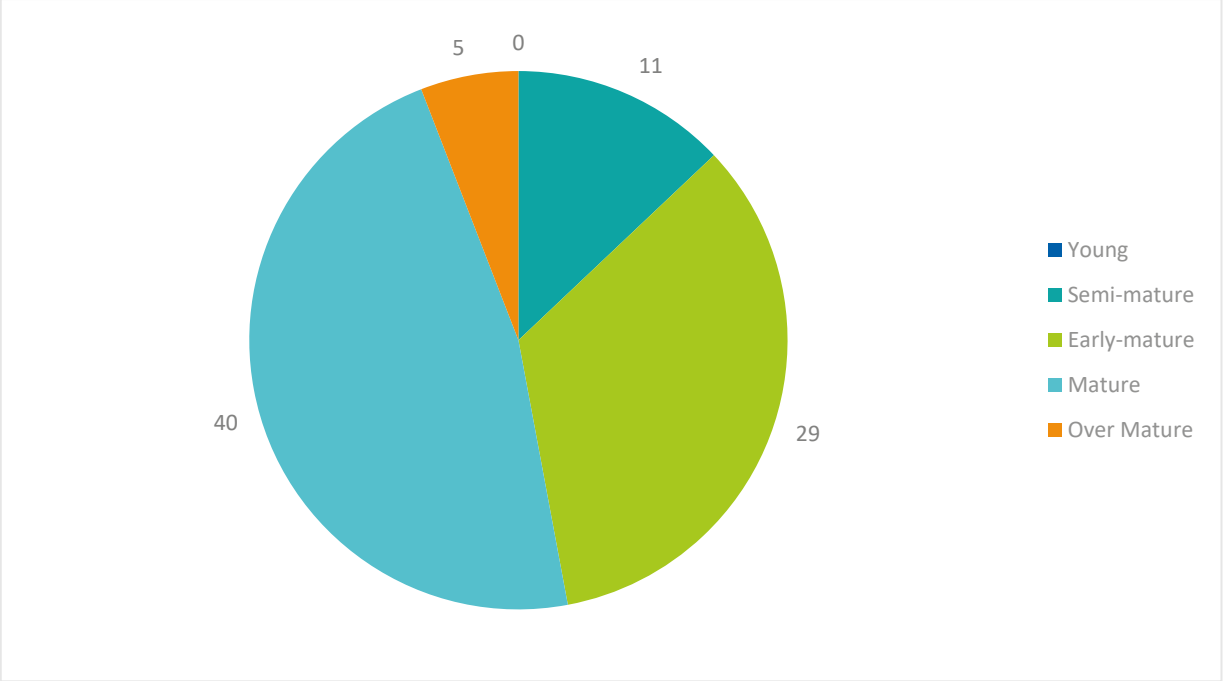


Figure 6: Life Stages of trees on site

5.4 Ancient, Veteran and Notable Trees

As noted in **Section 4.1,** as part of the on-site survey an assessment of the vegetation surveyed to identify the presence of Ancient, Veteran and Notable trees was undertaken following the RAVEN 2 methodology outlined at **Section 3.3**.

This assessment did not identify any trees of an Ancient, Veteran, or Notable status.

6 Arboricultural Impact Assessment

6.1 Overview

This section of the report summarises the direct and indirect impacts that the proposed development may have upon the site's tree stock.

An Arboricultural Impact Assessment plan, identifying impacts associated with the "General Arrangement" (ACAD-4021526-BUK-ZZ-00-M3-C-00005 export 170725), has been provided in **Appendix 5.**

This section of the report identifies the impacts of the proposed development upon the site's existing arboricultural resource. The main considerations are:

- *Trees proposed for removal. This includes trees:*
  - *That are located within the footprint of the proposed development areas.*
  - *Whose RPAs are heavily affected by the development.*
- *Retained trees that require access facilitation pruning works to minimize the risk of harm during construction works.*
- *Retained trees that are at risk of damage through disturbance of RPAs or proximity of works.*

Table 3: Arboricultural Impact Assessment

Impact	Reason	Tree Quality Assessment Category Grading*				Totals
		A	B	C	U	
Trees and groups proposed for removal	▪ Access for works. ▪ Significant RPA conflict with works.	None	3508, 3509, 3517, 3566	3511, 3516, 3530, 3589,	3564, 3565, 3573, 3586	**12**
Groups to be partially removed	▪ Access for works.	None	G13, G14, G17, G18	G16	None	**5**
Trees and groups requiring access facilitation pruning or coppicing works.	▪ Access to existing water course for debris removal	None	3552, 3558, G5, G12*, G13*, G14, G3560	3553, 3561	None	**9*** *: Includes groups also identified for partial removal
Retained trees and groups at risk of damage through disturbance of RPAs	▪ Development zones encroach into RPA.	None	T1, G11, G19, 3515, 3540, 3543, 3556, 3563, 3569, 3577, 3583	G4, G3579	None	**13**
Retained trees and groups that are unaffected by the proposed development.	▪ All works outside of RPAs and Canopies.	None	T6, G8, T9, G20, T21, W24, 3504, 3505, 3506, 3512, 3514, 3519, 3521, 3522, 3523, 3524, 3526, 3527, 3529, 3531, 3532, 3533, 3534, 3535, 3536, 3542, 3549, 3550, 3551, 3554, 3557, 3568, 3570, 3572, 3582	T2, G3, T7, G10, G22, G23, 3525, 3547, 3575, 3576, 3591	T15, 3574	**48**

6.2 Tree Removal

It is anticipated that the proposed development will require the removal of 12 individual trees (3508, 3509, 3511, 3516, 3517, 3530, 3564, 3565, 3566, 3573, 3586 and 3589). The trees to be removed comprise four moderate-quality, category B specimens, four low-quality, category C, specimens, and four specimens considered to be unsuitable for retention, category U.

Five groups of trees, including four groups of a moderate-quality (G13, G14, G17 and G18) and one group of a low-quality (G16), will also require partial removal to implement the proposed development.

Overall the vegetation removal proposed will result in the loss of approximately 1304m^2 of canopy cover from within woodland areas and the loss of approximately 493m^2 of scrub vegetation (G16) outside of woodland areas.

All these features anticipated for removal are to facilitate sufficient construction access to enable the movement and operation of machinery required to complete the drainage works.

Survey features have been proposed for removal where facilitation pruning is not considered enough to enable sufficient construction access for the proposed works.

Trees will be retained where possible but the appointed arboricultural consultant will determine the final extent of tree removal on site. Those trees that are anticipated to be retained on the edge of the working areas, may fall within the zone of removal if the works are to have significant impacts to their RPAs. It will be ensured that those trees that are retained will be properly protected, detailed in **Section 8.2**.

6.3 Facilitation Pruning / Vegetation Management

To enable sufficient construction access for the proposed development, facilitation pruning and vegetation management is anticipated to be a requirement for four trees (3552, 3553, 3558, 3561) and within five groups of trees (G5, G12, G13, G14, G3560) where access to the existing drainage channel to undertake silt removal and localised reprofiling will be required.

Such pruning is to include a crown lift (i.e. removal of lower limbs / branches to increase the ground clearance to the lowest branch) of each feature overhanging the proposed working area to 3.5m above ground level. Some features within close proximity of the drainage channel may also be coppiced to provide suitable access and to minimise ongoing conflict.

The final extent of vegetation management and access facilitation pruning works to be undertaken will be determined by the appointed arboricultural consultant on site. The final confirmation of the tree pruning and coppicing works undertaken will be sent to Rhondda Cynon Taf Council after.

6.4 Works within RPAs

The proposed development is anticipated to require works to be undertaken within the RPAs of retained trees on completion of tree removal. Such works are summarised in **Table 4,** along with details of recommended mitigation measures.

Table 4: Summary of potential damage to retained trees

Tree Number	Species	Potential Cause of Damage	Mitigation
3556, 3569, 3577, G3579	Various	▪ Clearance of existing watercourse, to include silt and debris removal. ▪ Potential arboricultural impacts from operation of plant and machinery during the works along the channel.	▪ Root presence directly under the channel is likely to have been prevented by the existing watercourse. ▪ Tree protection measures for retained trees to be implemented as detailed in Section 8 of this report. ▪ Works to be completed under arboricultural supervision.
3515, G4, G18	Various	▪ Installation of filter drain and upgrade of existing forest track. ▪ Works to upgrade existing forestry track will impact RPA of feature 3515 by approx. 15% of overall area due to formation of batter at track edge, works anticipated to require import of material and not excavation that would sever tree roots. ▪ Impacts to G18 will be minimal following initial vegetation clearance operations.	▪ Affected trees have been recorded with estimated positions. Impacts may decrease or increase during implementation. ▪ Tree positions to be confirmed prior to commencement of works, if impact is considered excessive additional tree removal will be required. ▪ Works to be completed under arboricultural supervision.
G11, 3563, 3583	Various	▪ Operation of plant equipment for installation of horizontally bored lateral drains. ▪ Installation of stone access track for works access. ▪ Access for lateral drain installation.	▪ A 3m vegetation clearance zone has been allowed for based upon contractors indicated requirements. ▪ Tree protection measures for retained trees to be implemented as detailed in Section 8 of this report. ▪ Affected trees have been recorded with estimated positions. Impacts may decrease or increase during implementation. ▪ Tree positions to be confirmed prior to commencement of works, if impact is considered excessive additional tree removal will be required.

Tree Number	Species	Potential Cause of Damage	Mitigation
T1, G19, 3540, 3543	Various	▪ Clearance of existing ditch.	▪ Works comprise vegetation management within ditch only, no significant risk to retained trees

Overall, it is considered the potential harm to the trees identified as at risk from these operations in **Table 4,** can be adequately controlled by the adoption of precautionary working practices, specified in more detail within **Section 8** of this report, during the proposed development. If works are anticipated to heavily impact the RPAs of the retained trees, then trees would fall within the zone of removal, if decided by the appointed arboricultural consultant when on site.

6.5 Impacts from Construction Related Operations

6.5.1 Site Access

During development, construction access to the site and compounds will be provided via the existing forestry tracks. Retained vegetation adjacent to access tracks will, where necessary, be protected by the installation of tree protection barriers.

6.5.2 Delivery and Storage of Materials

Material deliveries to the site will utilise the access points described in **section 6.5.1** above.

Materials storage areas are to be provided within the site compounds. No materials storage will occur within the RPAs of retained trees across the site.

6.5.3 Site Compound and Welfare Facilities

Two site compound locations have been identified, one off the existing track accessed via Herbert Street and one off the existing forest road in the northern section of the wider site. Both compound areas are outside of the RPAs of retained trees.

6.5.4 Contractors Parking

Contractor's parking will be accommodated within the site compounds.

7 Preliminary Tree Work

7.1 Tree Work Schedule

The proposed development has anticipated the removal of 12 individual trees and the partial removal of five further tree groups,. Facilitation pruning is also an anticipated requirement to enable sufficient construction access for the required works.

The trees to be removed have been identified in red on the Arboricultural Impact Assessment Plan contained in **Appendix 5** and a schedule of tree work has been provided within **Appendix 11,** which includes those trees to be removed for the proposed development along with any facilitation pruning requirements.

All tree work will only be carried out on approval from Rhondda Cynon Taf Council and the relevant landowner, where this may be different. All tree work should be carried out prior to commencement of construction activities and prior to the erection of the tree protection measures.

7.2 Felling Licence

Where exceptions are not already in place, such as those mentioned in **Section 4.5** of this report, a felling licence is likely to be required for the proposed tree removals unless planning permission is granted and therefore a felling licence will not be required.

7.3 Standard of Tree Work

All tree work and felling operations should be carried out in accordance with BS3998:2010 'Recommendations for Tree Work'; current arboricultural industry guidelines and best practice; and all relevant Health & Safety standards.

Tree work is a specialist task that requires operatives to be appropriately qualified, skilled, and adequately insured. Guidance on selecting an appropriate contractor can be obtained from the Arboricultural Association, who also maintains a directory of Approved Contractors. The Arboricultural Association can be contacted on 01242 522152 or via their website http://www.trees.org.uk.

7.4 Wildlife Constraints

All tree work operations must comply with The Wildlife and Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000, which provide statutory protection to birds, bats and other species, all of which could inhabit trees. Where works may constitute an offence, advice will be acquired from a suitably qualified ecologist before works are able to proceed. The ecology report (ref: 'Ecology Report for Planning 4021526-BUK-ZZ-00-RP-EN-00013') will contain all the relevant mitigation details.

7.5 Modification to Tree Work Schedule

Should the recommended work schedule require modification, for whatever reason, this will be agreed with the appointed Arboricultural Consultant and records of any amendments will be submitted to Rhondda Cynon Taf Council.

8 Mitigation of Harm

8.1 Overview

The contractors working for / on behalf of Natural Resources Wales will be following the precautions set out below.

8.2 Tree Protection Measures

In line with Section 6.2.1 of BS5837:2012, all trees that are being retained on site should be protected by barriers and/or ground protection before any materials or machinery are brought onto the site, and before any demolition, development or stripping of soil commences.

Where all activity can be excluded from the RPA, vertical barriers should be erected to create a construction exclusion zone. The proposed locations of the tree protection barriers for the development are provided on the AIAP contained in **Appendix 5**

In line with Section 6.2.2 of BS 5837:2012, which requires that the tree protection barriers be fit for the purpose of excluding construction activity and that they provide adequate protection to the trees, it is proposed that they will consist of 2m tall, welded mesh panels supported on scaffold poles driven into the ground. An example of this type of barrier is contained in **Appendix 12**.

To enable site operatives to appreciate the purpose of the protective fencing and reduce the risk of operatives attempting to move them, all-weather notices should be erected on the barriers similar to the example in **Appendix 13**.

Due to the nature of the site, which is steeply sloping, and the type of works to be undertaken it will not be feasible, nor necessary, to install vertical tree protection barriers in all locations where works are to occur.

In particular, where works are to be undertaken along the existing watercourse on the western side of the site, running through G5, G13 and G14, the use of vertical tree protection barriers is not considered to be achievable.

As such, to ensure that retained trees within these areas are not damaged during the proposed works along the existing watercourse, it is proposed that a system such as 'Trunk Protecta®' waterproof high-vis canvas tree guards, provided by Green Grid Systems, are attached to the stems of retained trees as protection from any impact damage. The 1.8m variant of this protection is to be used for the proposed works which will act as an abrasion and impact resistant protective barrier over tree bark, stopping wounds and injuries that could allow disease and decay to enter the tree. An example of this type of protection is contained at **Appendix 14.**

The barriers will only be adjusted or removed if prior written approval is obtained from Rhondda Cynon Taf Council.

8.3 Site Monitoring

The developer should appoint an Arboricultural Consultant to monitor the tree protection measures on site. The purpose of this is to ensure the protection measures remain in situ and continue to provide sufficient protection to the trees.

This role will initially entail the Arboricultural Consultant liaising with the developer and Rhondda Cynon Taf Council to ensure the recommended protection measures are suitably installed. Once the tree protection measures have been installed, and construction activity commences, the extent of any on-going site monitoring is at the discretion of Rhondda Cynon Taf Council.

A formal record of these supervisory visits should be recorded and kept on file; a copy should also be circulated to all relevant parties, including Rhondda Cynon Taf Council.

8.4 Arboricultural Supervision

The densely vegetated nature of the site, particularly in the western section where works are proposed within the existing watercourse, means that works will be undertaken in close proximity to retained trees. For this reason, it is recommended that all operations within the existing watercourse are completed under arboricultural supervision.

8.5 Key Contacts during Development

A list of key contacts relevant to this site that may be required throughout the duration of the works has been included in **Appendix 15**.

9 Conclusion

An initial tree survey, to establish the tree constraints on the site, was carried out by Ed Lusk, an ADAS Principal Arboricultural Consultant, on the 15th and 16th August 2024, with a subsequent verification survey undertaken on the 22nd July 2025. The tree survey was carried out in accordance with the recommendations contained within BS5837:2012.

The tree survey identified a total of 85 arboricultural features comprising 66 individual trees, 18 groups of trees and one area of woodland. The vegetation surveyed primarily comprised pioneer species trees and dense areas of scrub vegetation.

Of the features surveyed, 60 were identified as moderate-quality category B specimens, and 19 were identified as being low-quality category C specimens. In addition, six features were assessed as being category U specimens. No trees of a high-quality, category A, were recorded.

The proposed development will require the removal of 12 arboricultural features including four moderate-quality, category B, specimens, four low-quality, category C, specimens and four specimens considered to be unsuitable for retention, category U, to facilitate the works.

The partial removal of four further moderate-quality, category B, tree groups and of one low-quality, category C, tree group will be required to create working space for the proposed installation of new horizontally bored lateral drains, installation of an access track and for establishment of a site compound.

Overall the vegetation removal proposed will result in the loss of approximately 1304m^2 of canopy cover from within woodland areas and the loss of approximately 493m^2 of scrub vegetation (G16) outside of woodland areas.

In addition to the proposed tree removal facilitation pruning and vegetation management is anticipated to be a requirement for four trees and within five groups of trees where access to the existing drainage channel to undertake silt removal and localised reprofiling will be required.

Such pruning is to include a crown lift (i.e. removal of lower limbs / branches to increase the ground clearance to the lowest branch) of each feature overhanging the proposed working area to 3.5m above ground level. Some features within close proximity of the drainage channel may also be coppiced to provide suitable access and to minimise ongoing conflict.

The final extent of vegetation management and access facilitation pruning works to be undertaken will be determined by the appointed arboricultural consultant on site. The final confirmation of the tree pruning and coppicing works undertaken will be sent to Rhondda Cynon Taf Council after.

Trees will be retained where possible but the appointed arboricultural consultant will determine the final extent of tree removal on site. Those trees that are anticipated to be retained on the edge of the working

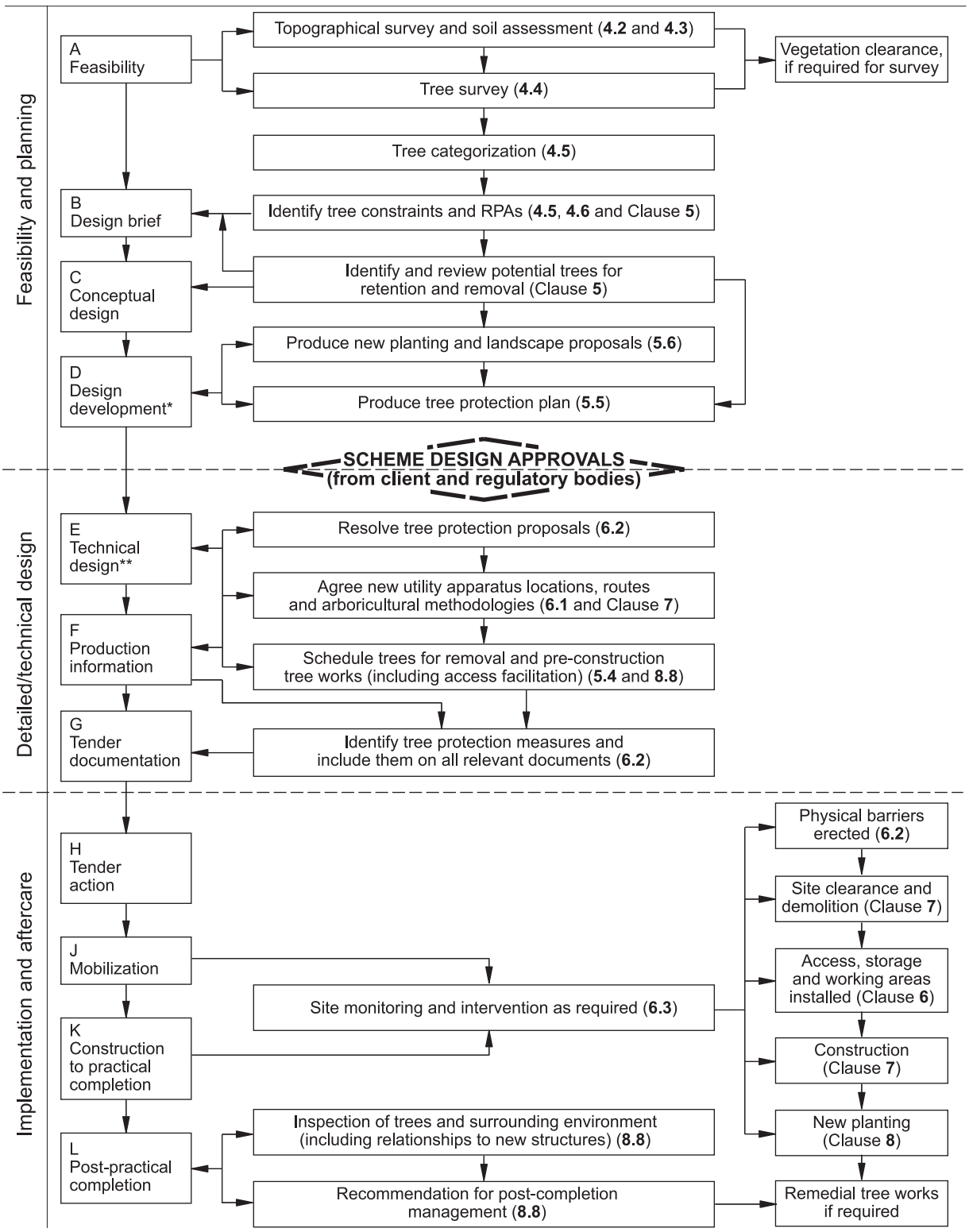
areas, may fall within the zone of removal if the works are to have significant impacts to their RPAs. The final confirmation of the trees to be removed will be sent to Rhondda Cynon Taf Council.

ADAS are satisfied that if the recommendations contained within this Arboricultural Impact Assessment are followed, the proposed development can be successfully undertaken with minimal harm being caused to the retained trees adjacent to the work area.

Appendix 1: BS5837:2012 Key Sequence of Events for Development Planning

See following page.

Figure 1 **The design and construction process and tree care**



** The design development stage D in particular is an iterative process, responding to and resolving constraints as they emerge but, once completed, there needs to be a high level of certainty for proposed outcomes.*

*** See Commentary on Clause **6**.*

Appendix 2: Tree Constraints Plan

See following page.

G3560*
B2

3565*
U

3564*
U

3561*
C2

3557*
B2

G13*
B2

3563*
B2

G5*
B2

3509*
B2

3508*
B2

3516*
C2

3517*
B2

G17*
B2

3515*
B2

G4*
C2

G16*
C2

3519*
B2

3511*
C1

3514*
B2

3522*
B2

3525*
C1

3530*
C2

3512*
B2

3521*
B2

3532*
B2

3523*
B2

3526*
B2

G18*
B2

3531*
B2

G16*
C2

3529*
B2

3524*
B2

3506*
B2

3533*
B2

3505*
B2

3527*
B2

3534*
B2

3504*
B2

T21*
B1

3536*
B2

G16*
C2

G19*
B2

3535*
B2

G20*
B2

T2*
C2

3547*
C2

3540*
B2

G16*
C2

T1*
B1

G3*
C2

3543*
B2

3542*
B2

N

0 20m

1:200

LEGEND

TREE CATEGORIES - NOTE: Quality class description derived from BS5837:2012

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

Category B
Trees / Groups of moderate quality: with an estimated remaining life expectancy of at least 20 years.

Category C
Trees / Groups of low quality: with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

Category U
Trees / Groups: in such a condition that they cannot realistically be retained as living trees in the context of current land use for longer than 10 years.

Root Protection Area (RPA)

T#* Trees not included in original site survey and therefore positions are indicative only.

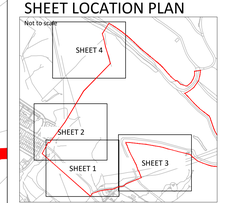
Tree Survey Boundary

Based on Ordnance Survey Master Map data '240805_OS_Data_Contractors'. Please see original for details.

This drawing was produced in colour; a monochrome copy should not be relied upon.

SHEET LOCATION PLAN

Not to scale



Rev.	Issue Details.	Date.
Rev B	Extended Survey Area	August 2025
Rev A	Amended Labels	October 2024
First Issue		August 2024

Client:
Binnies

Project:
Pen Yr Englyn

Drawing Title:
Tree Constraints Plan (Sheet 1)

Drawing No: ADAS_1052590_Binnies_Pen Yr Englyn_TCP

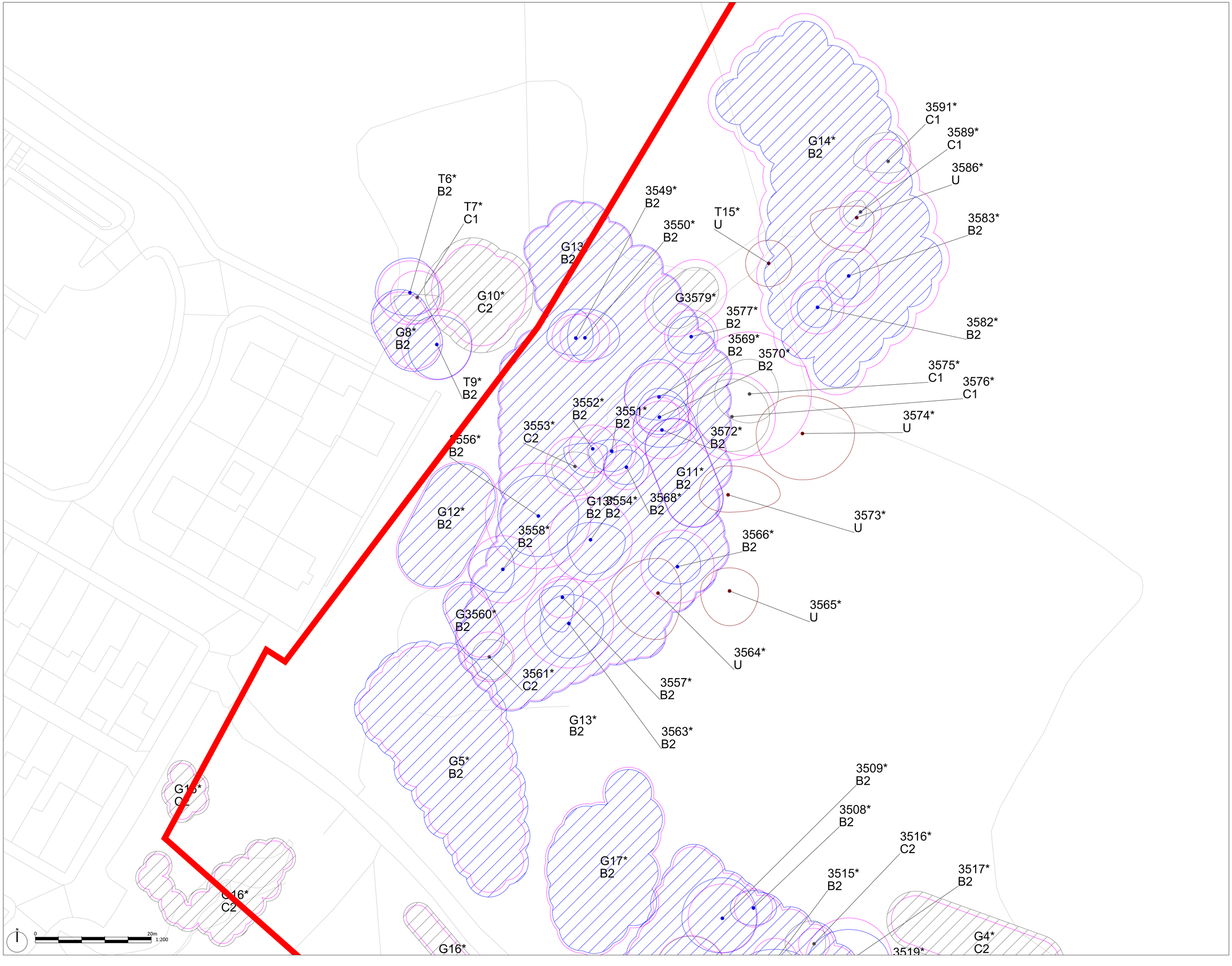
Scale: 1:200

Drawn by: EL Date: 08.08.25

Checked by: IB Date: 11.08.25

ADAS, 172 Chester Road, Helsby
Frodsham, WA6 0AR

Tel: 01928 726006



LEGEND

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Category U
Trees / Groups: in such a condition that they cannot realistically be retained as living trees in the context of current land use for longer than 10 years.

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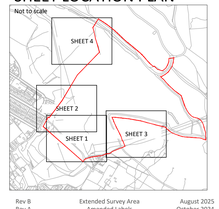

Rev.	Issue Details.	Date.
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First Issue		August 2024

Client:
Binnies

Project:
Pen Yr Englyn

Drawing Title:
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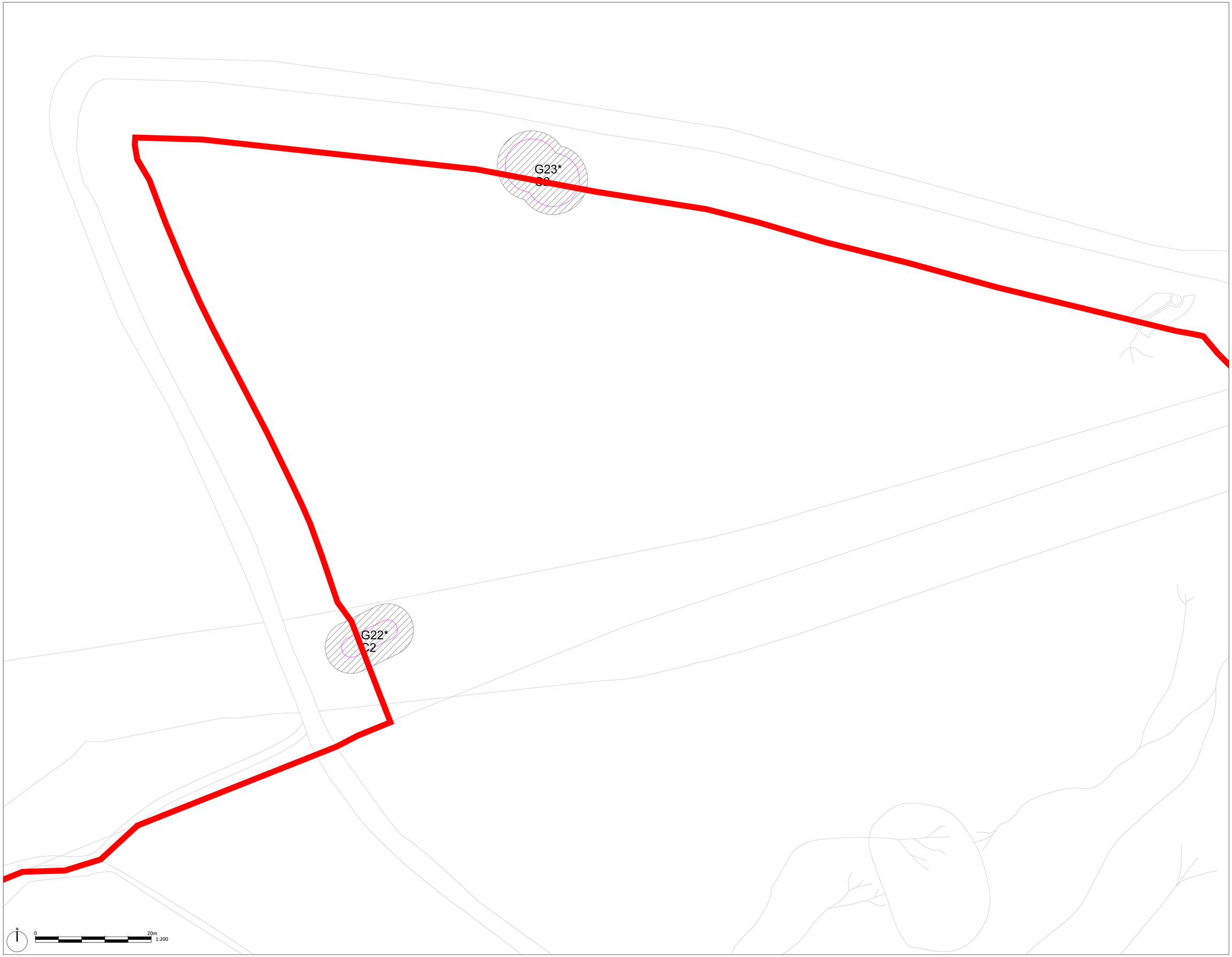

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LEGEND

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Category C
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Category U
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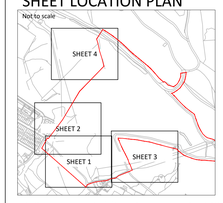

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First Issue		August 2024

Client:
Binnies

Project:
Pen Yr Englyn

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Tree Constraints Plan (Sheet 3)

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Scale: 1:200

Drawn by: EL Date: 08.08.25

Checked by: IB Date: 11.08.25

ADAS, 172 Chester Road, Helsby
Frodsham, WA6 0AR

Tel: 01928 726006

W24*
B2

N

0 20m

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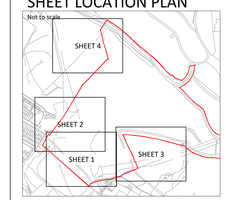

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First Issue	-	August 2024

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Project:
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Drawing Title:
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Appendix 3: BS5837:2012 Cascade Chart for Tree Quality Assessment

See following page.

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	• Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline • Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality *NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see **4.5.7**.*			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	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	See Table 2
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	Trees with material conservation or other cultural value	See Table 2
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 with no material conservation or other cultural value	See Table 2

Appendix 4: RPA Guidance

The Root Protection Area (RPA) is calculated from the stem diameter of the tree, in accordance with the guidance contained in section 4.6 of BS 5837:2012.

These areas are normally sacrosanct, and should not be entered, by traffic or foot, during construction, or used to store materials, fuel, or chemicals.

Protective fencing should be erected along the edge of the RPA, before construction begins, and should not be moved until after all construction has finished and vacated the site. The type of fencing used should be fit for purpose, and ordinarily conform to the recommendations given in section 6.2.2 of BS 5837:2012 and be erected similar to the example shown in Figure 2 of the same standard.

Where underground services cannot be routed outside the RPA, these should be installed by trenchless technology, such as a directional drill. Where this technology is used the underground channel created should be no less than 600mm below normal ground level, or the base of the tree. Also, the starting and receiving excavations should not be within the RPA. Drill channel lubricant should be avoided, other than water, unless precautions are taken to prevent contamination of soil and possibly water. Hand digging may be an alternative to trenchless excavation, but this is less desirable, and not always practical.

When determining the workable space around the RPA of a tree or trees, it is also important to maintain a working zone of one metre (which is usually sufficient) between the edge of construction and the protective fencing.

Appendix 5: Arboricultural Impact Assessment Plan

See following page.

188m² of G17 removed for horizontal bored drain installation and access track.

3508, 3509, 3511, 3516, 3517 and section of G18 removed for horizontal bored drain installation and forest track upgrade.

Total canopy removal 543m².

3530 (63m² canopy) removed to permit forest track upgrade.

Scrub vegetation (G16) removed for compound and laydown area.

Total 493m² of vegetation loss.

TANK INLET

FORESTRY TRACK 1

OUTFALL E

OUTFALL C

CULVERT 5

CULVERT 4

FILTER 3

BLOCKSTONE CASCADE 3

Area 1240m

Perimeter 832

LEGEND

TREE CATEGORIES - NOTE: Quality class description derived from BS5837:2012

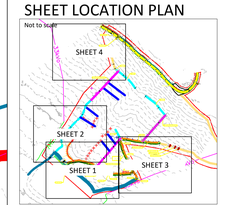
- **Category A** Trees / Groups of high quality: with an estimated remaining life expectancy of at least 40 years.
- **Category B** Trees / Groups of moderate quality: with an estimated remaining life expectancy of at least 20 years.
- **Category C** Trees / Groups of low quality: with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.
- **Category U** Trees / Groups: in such a condition that they cannot realistically be retained as living trees in the context of current land use for longer than 10 years.
- **Root Protection Area** (RPA)
- T#* Trees not included in original site survey and therefore positions are indicative only.
- Trees / Groups to be removed
- Area of vegetation management - pruning and copping to provide access for clearing existing watercourse.
- Tree Protection Fence
- Site Boundary

Based on 'ACAD-4021526-BUK-ZZ-00-M3-C-00005 export 170725.dwg'. Please see original for details.

This drawing was produced in colour; a monochrome copy should not be relied upon.

SHEET LOCATION PLAN

Not to scale



Rev.	Issue Details.	Date.
Rev B	Amended layout	August 2025
Rev A	Updated following client review	December 2024
First Issue		November 2024

Client: Binnies

Project: Pen Yr Englyn

Drawing Title: Arboricultural Impact Assessment Plan (S1)

Drawing No: ADAS_1052590_Binnies_Pen Yr Englyn_AIAP

Scale: 1:200

Drawn by: EL Date: 08.08.25

Checked by: IB Date: 11.08.25

ADAS, 172 Chester Road, Helsby
Frodsham, WA6 0AR

Tel: 01928 726006

N

0 20m

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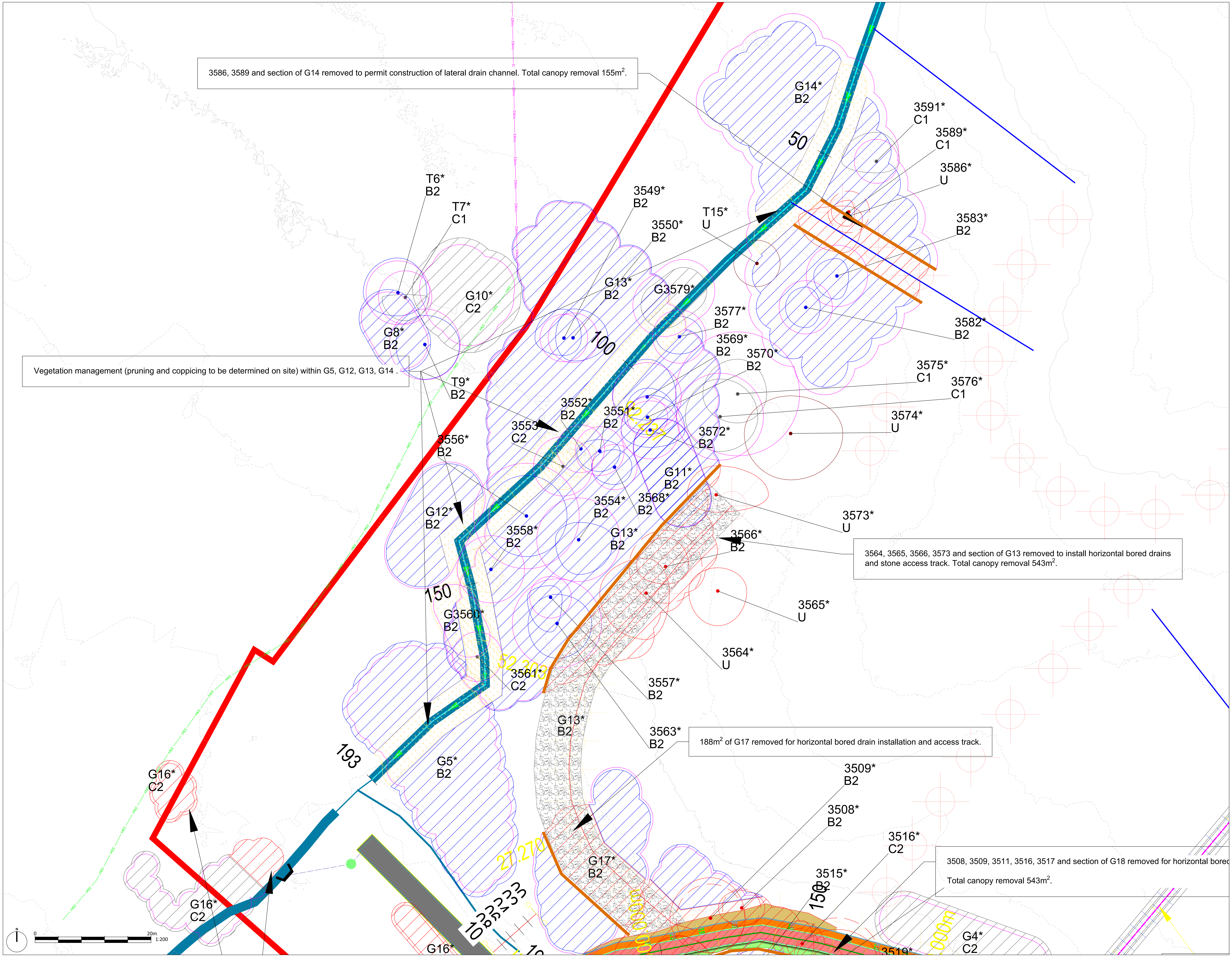


LEGEND

TREE CATEGORIES - NOTE: Quality class description derived from BS5837:2012

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

Category B
Trees / Groups of moderate quality: with an estimated remaining life expectancy of at least 20 years.

Category C
Trees / Groups of low quality: with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

Category U
Trees / Groups: in such a condition that they cannot realistically be retained as living trees in the context of current land use for longer than 10 years.

Root Protection Area (RPA)

T#* Trees not included in original site survey and therefore positions are indicative only.

Trees / Groups to be removed

Area of vegetation management - pruning and copping to provide access for clearing existing watercourse.

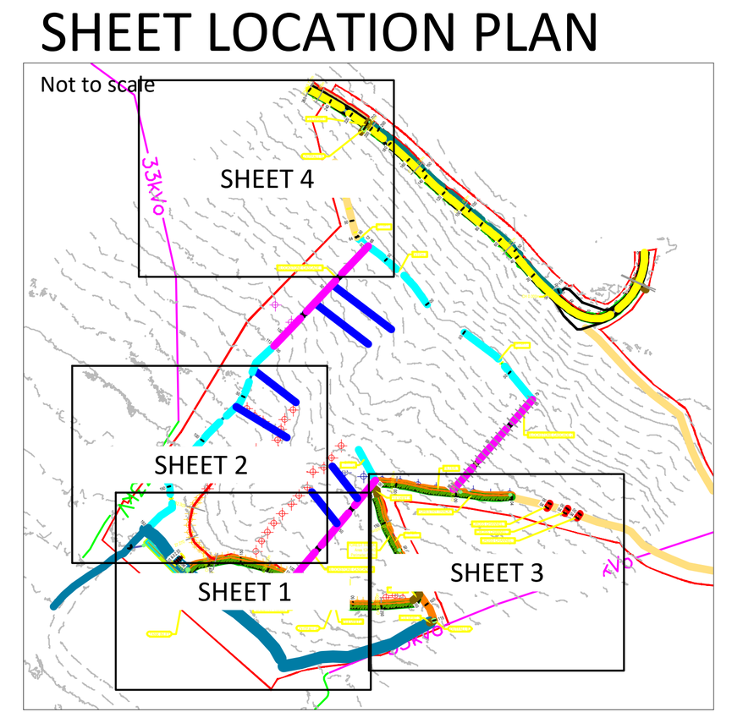
Tree Protection Fence

Site Boundary

Based on 'ACAD-4021526-BUK-ZZ-00-M3-C-00005 export 170725.dwg'. Please see original for details.

This drawing was produced in colour; a monochrome copy should not be relied upon.

SHEET LOCATION PLAN



Rev.	Issue Details.	Date.
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First Issue	-	November 2024

Client:
Binnies

Project:
Pen Yr Englyn

Drawing Title:
Arboricultural Impact Assessment Plan (S2)

Drawing No: ADAS_1052590_Binnies_Pen Yr Englyn_AIAP

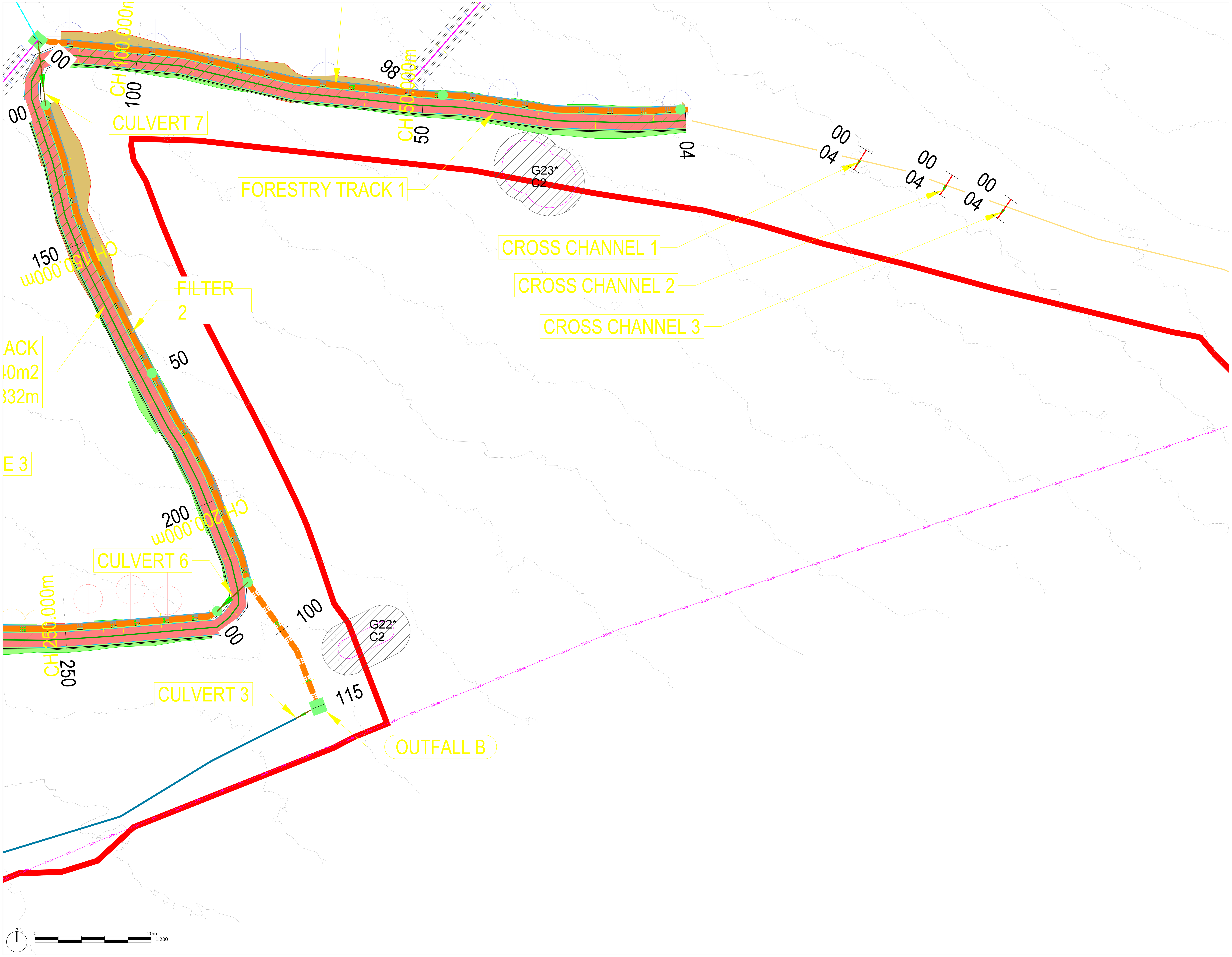
Scale: 1:200

Drawn by: EL — Date: 08.08.25

Checked by: IB — Date: 11.08.25

ADAS, 172 Chester Road, Helsby
Frodsham, WA6 0AR

Tel: 01928 726006



LEGEND

TREE CATEGORIES - NOTE: Quality class description derived from BS5837:2012

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

Category B
Trees / Groups of moderate quality: with an estimated remaining life expectancy of at least 20 years.

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Trees / Groups of low quality: with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

Category U
Trees / Groups: in such a condition that they cannot realistically be retained as living trees in the context of current land use for longer than 10 years.

Root Protection Area (RPA)

T#* Trees not included in original site survey and therefore positions are indicative only.

Trees / Groups to be removed

Area of vegetation management - pruning and copping to provide access for clearing existing watercourse.

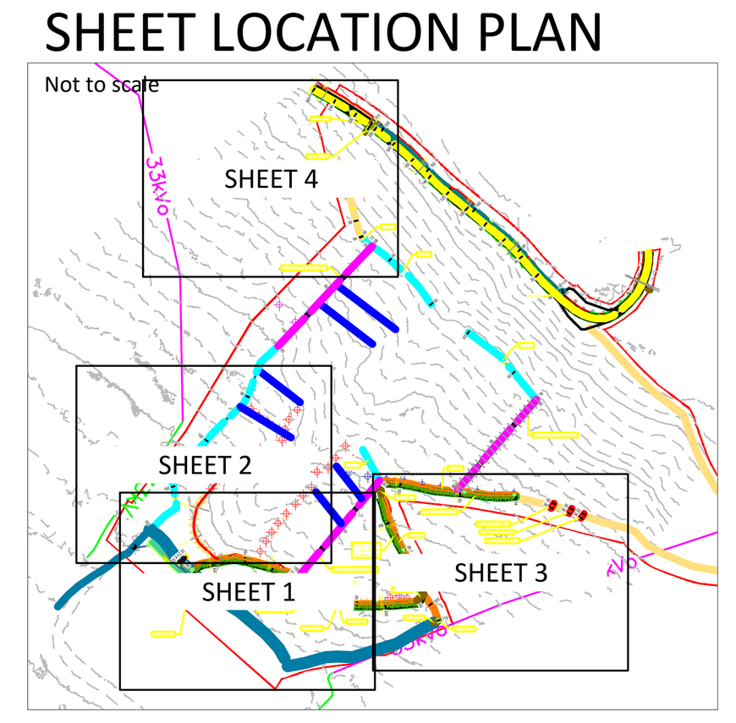
Tree Protection Fence

Site Boundary

Based on 'ACAD-4021526-BUK-ZZ-00-M3-C-00005 export 170725.dwg'. Please see original for details.

This drawing was produced in colour; a monochrome copy should not be relied upon.

SHEET LOCATION PLAN



Rev.	Issue Details.	Date.
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First Issue	-	November 2024

Client:
Binnies

Project:
Pen Yr Englyn

Drawing Title:
Arboricultural Impact Assessment Plan (S3)

Drawing No: ADAS_1052590_Binnies_Pen Yr Englyn_AIAP

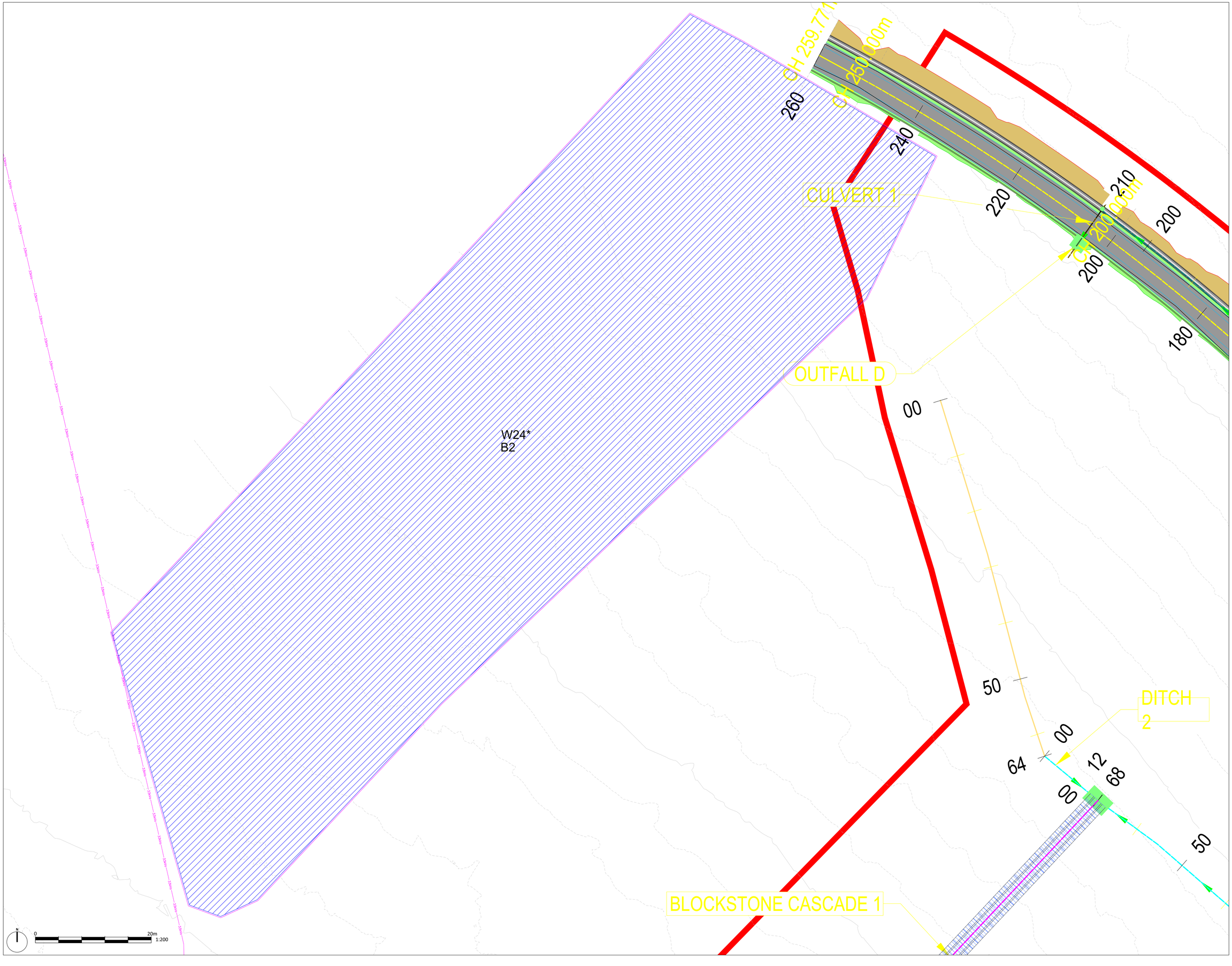
Scale: 1:200

Drawn by: EL Date: 08.08.25

Checked by: IB Date: 11.08.25

ADAS, 172 Chester Road, Helsby
Frodsham, WA6 0AR

Tel: 01928 726006



LEGEND

TREE CATEGORIES - NOTE: Quality class description derived from BS5837:2012

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

Category B
Trees / Groups of moderate quality: with an estimated remaining life expectancy of at least 20 years.

Category C
Trees / Groups of low quality: with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

Category U
Trees / Groups: in such a condition that they cannot realistically be retained as living trees in the context of current land use for longer than 10 years.

Root Protection Area (RPA)

T#* Trees not included in original site survey and therefore positions are indicative only.

Trees / Groups to be removed

Area of vegetation management - pruning and copping to provide access for clearing existing watercourse.

Tree Protection Fence

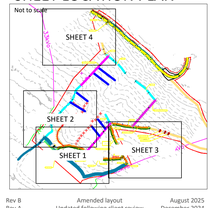
Site Boundary

Based on 'ACAD-4021526-BUK-ZZ-00-M3-C-00005 export 170725.dwg'. Please see original for details.

This drawing was produced in colour; a monochrome copy should not be relied upon.

SHEET LOCATION PLAN

Not to scale



Rev.	Issue Details.	Date.
Rev B	Amended layout	August 2025
Rev A	Updated following client review	December 2024
First Issue		November 2024

Client:
Binnies

Project:
Pen Yr Englyn

Drawing Title:
Arboricultural Impact Assessment Plan (S4)

Drawing No: ADAS_1052590_Binnies_Pen Yr Englyn_AIAP

Scale: 1:200

Drawn by: EL Date: 08.08.25

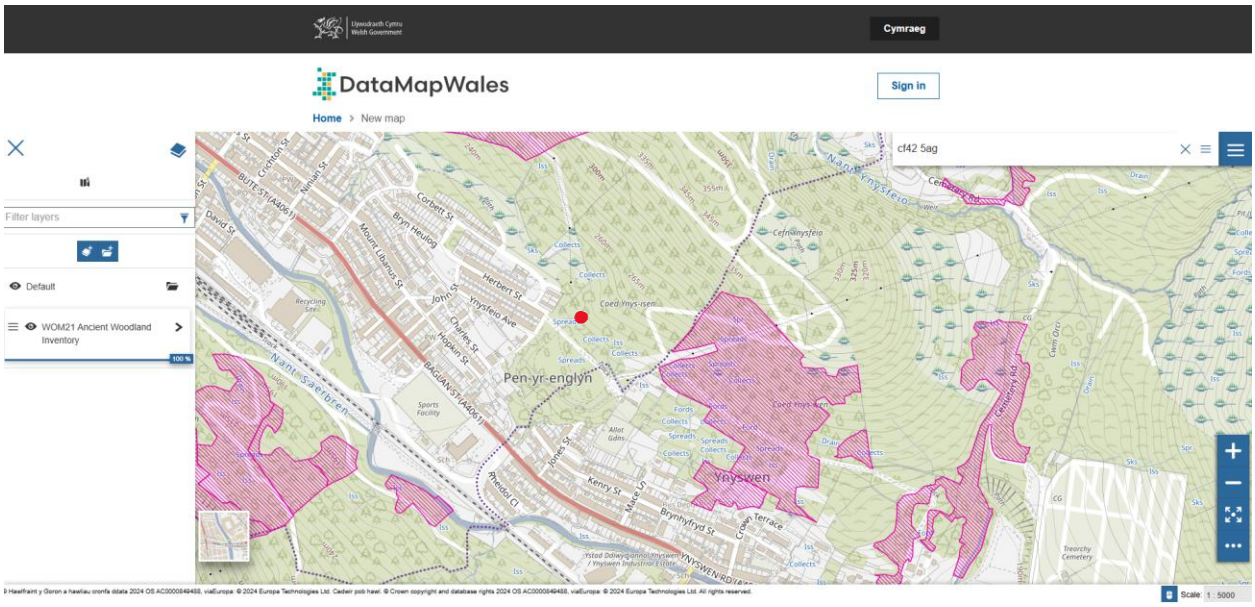
Checked by: IB Date: 11.08.25

ADAS, 172 Chester Road, Helsby
Frodsham, WA6 0AR

Tel: 01928 726006

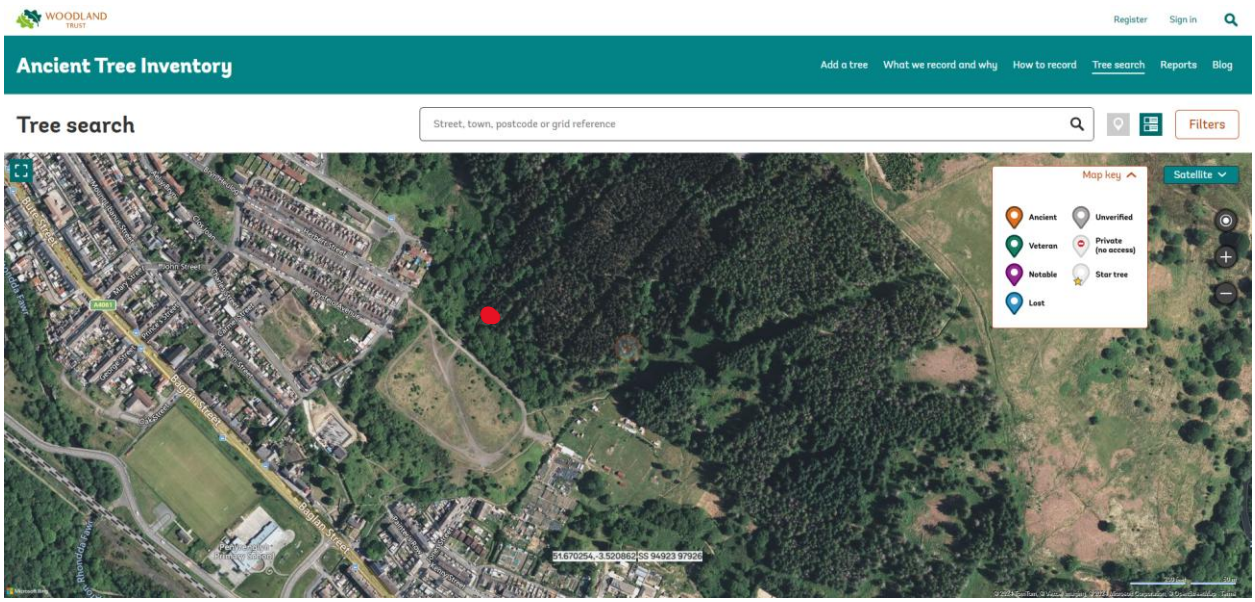
Appendix 6: Ancient Woodland Search

Site location indicated by red dot.



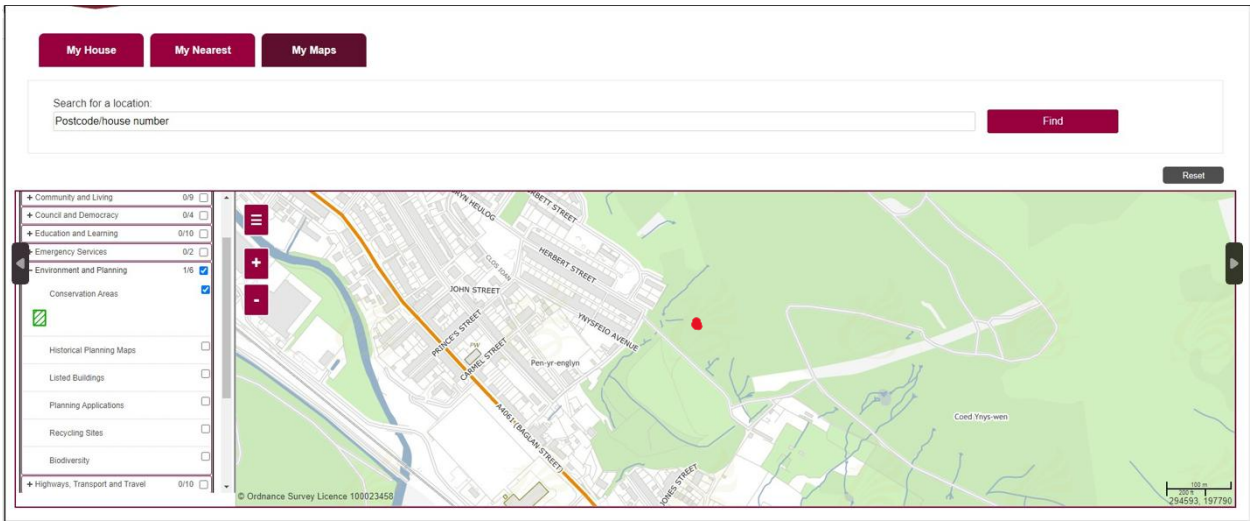
Appendix 7: Ancient Tree Inventory Search Plan

Site location indicated by red dot.

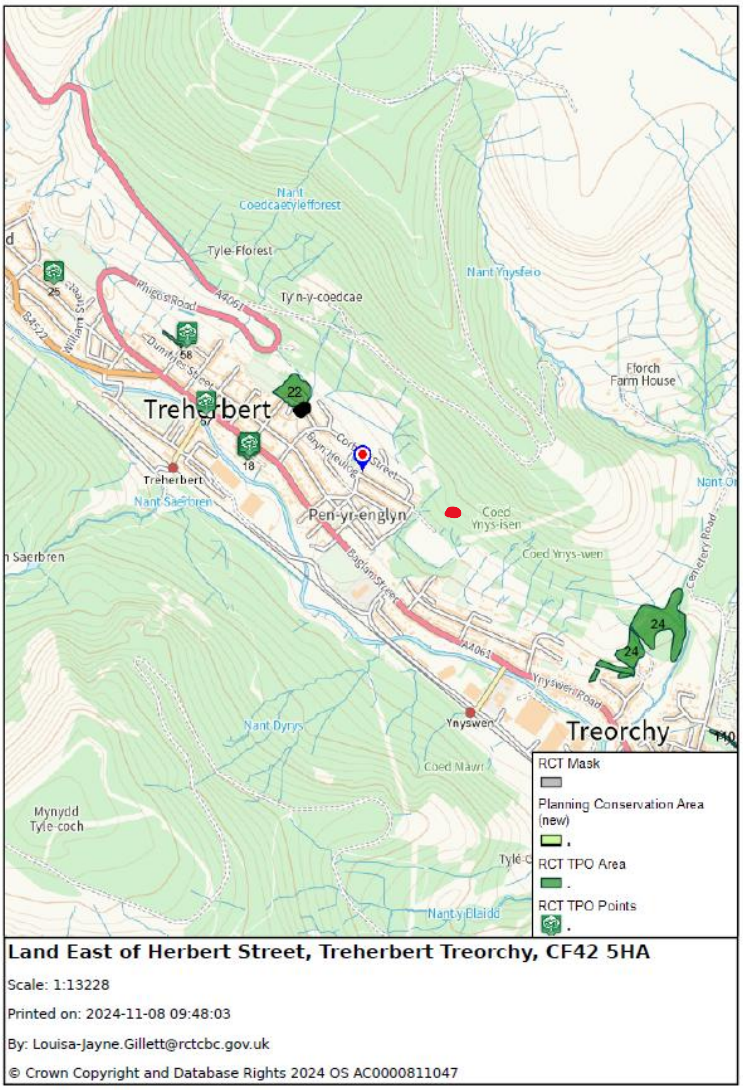


Appendix 8: TPO and CA Search

CA Search - Site location indicated by red dot.

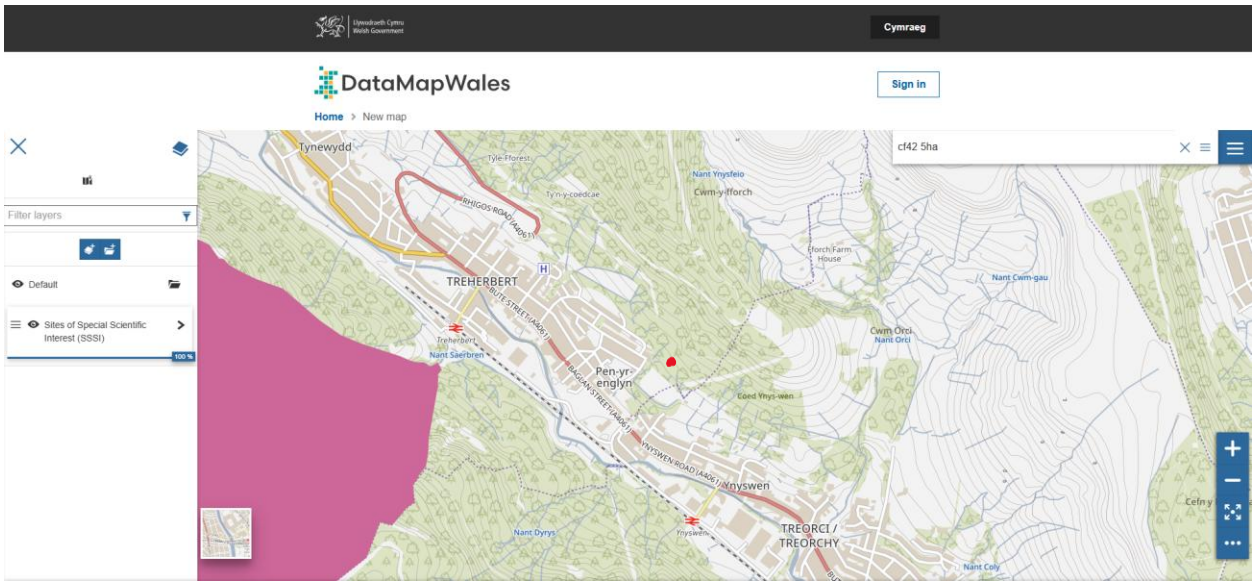


TPO Search - Site location indicated by red dot.



Appendix 9: SSSI Search Plan

Site location indicated by red dot.



Appendix 10: Tree Survey Schedule

See following page.

Column Heading	Description
Tree Ref No.	All individual trees and groups of trees have been given a unique reference number. Each number is prefixed by a letter. ▪ T = Individual tree ▪ G = Group of trees ▪ H = Hedgerow * W = Woodland
Species	The English common name has been used.
Single or Multiple stem (S or M)	* 'S' represents a tree which has a single clear stem to at least 1.5m above ground level. * 'M(a)' represents a tree where the main stem divides into two to five stems below 1.5m above ground level, and * 'M(b)' represents a tree where the main stem divides into 6 or more stems below a height of 1.5m.
Height (m)	Where possible tree heights are measured using a laser. In some instances such as in close groups of trees, one height may be measured and other nearby trees estimated from this height. Measurements are provided in metres.
Stem Diameter (mm)	S_n represents the stem number. Measurements are provided in millimetres at 1.5m above ground level for single stemmed trees.
Very Large Girth (y/n)	Girth is very large for species inaccordance with Fig 1.3 of publication 'Ancient and other veteran trees: further guidance on management' Acient Tree Forum 2013. RAVEN - Step 1
Ancient (A), Veteran (V) or Notable (N)	Result of the RAVEN assessment © Julian Forbes-Laird 2018 www.flac.uk.com; provided on separate ADAS Sheet 2. (RAVEN = Recognition of Ancient, Veteran & Notable Trees)
Branch Spread (m)	Measured in metres to the four cardinal compass points (N, E, S, W).
Crown Clearance Life Stage	(1) Height in metres of the first significant branch, and the direction of growth. (2) Height in metres of lowest part of crown. The stage at which the tree is within its lifecycle (Y = young, SM = semi-mature, EM = early-mature, M = mature, OM = over mature, V = veteran)
General Observations	Any relevant observations are recorded, with particular reference to structural and/or physiological condition.
Preliminary Management Recommendations	Recommendations are made where management work is required for reasons of health and safety or sound arboricultural management.
Estimated Remaining Contribution (years)	An estimation of how long the feature will contribute to its surroundings. This is recorded in bands of either <10 years, 10+ years, 20+ years and 40+ years.
Tree Quality Grading	The trees are graded to the categories prescribed within BS5837:2012 (U, A, B & C).
Root Protection Area	Calculated as prescribed in section 4.6 of BS5837:2012, provided as an area (m^2) and a radius from the tree's stem (m).
Note: Those measurements shown in *italics* have been estimated, usually where access has restricted it being taken.	

Tree Ref No.	Species	Single or Multiple Stem	Height	Stem Diameter (mm)										Very Large Girth	Ancient, Veteran or Notable	Branch Spread (m)				Crown Clearance (m)		Life Stage	General Observations (structural / physiological condition)	Preliminary Management Recommendations	Estimated Remaining Contribution	Tree Quality Grading	Root Protection Area	
		(S or M)	(m)	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	(Y / N)	(A, V or N)	N	E	S	W	(1)	(2)				(years)		(m^2)	(radius in m)
T1	Larch	S	14	400										N		5	6	7	7	1.0-W	1	M	Minor deadwood and branch dieback in crown.	None	20+	B1	72.4	4.8
3543	Alder	S	12	430										N		3	4	5	4	1.0-S	1	M	Crown shape distorted due to group pressure. Trifurcate at 2m.	None	20+	B2	83.7	5.2
3542	Willow	M(a)	14	260	230	280	300	230						N		2	5	7	5	0.5-S	1	M	Multi-stemmed at 1m. Crown shape distorted due to group pressure. Minor deadwood in crown.	None	20+	B2	154.6	7.0
3540	alder	S	12	200										N		2	2	3	4	4.0-W	4	SM	Etiolated form. Crown shape distorted due to group pressure.	None	20+	B2	18.1	2.4
3536	Birch	M(a)	14	200	220									N		5	6	4	4.5	3.0-W	4	EM	Bifurcate at base, Crown shape distorted due to group pressure.	None	20+	B2	40.0	3.6
3535	Birch	S	14	280										N		4	3	4	5	4.0-W	4	EM	Crown shape distorted due to group pressure.	None	20+	B2	35.5	3.4
3534	birch	S	14	280										N		3	4	5	4	3.0-S	3	EM	Minor deadwood in crown. Crown shape distorted due to group pressure.	None	20+	B2	35.5	3.4
3533	Birch	S	15	350										N		6	5	6	5	3.0-W	5	M	No significant defects.	None	20+	B2	55.4	4.2
3532	Birch	M(a)	14	220	220									N		4.5	4	3	4	3.0-N	4	EM	Bifurcate at base. Minor deadwood in crown.	None	20+	B2	43.8	3.7
3531	Alder	S	16	300										N		4	3.5	4.5	5	4.0-N	4	EM	Trifurcate at 2m. Minor deadwood in crown.	None	20+	B2	40.7	3.6
3530	Willow	M(a)	12	80	120	200	150							N		3	5	5	5	2.5-W	3	SM	Multi-stemmed at base. Crown shape distorted due to group pressure. Minor deadwood in crown.	None	10+	C2	37.7	3.5
3506	Alder	M(a)	16	410	250	460								N		5	5	7.5	7	3.0-E	4	M	Bifurcate at base. Minor deadwood and branch dieback in crown.	None	20+	B2	200.1	8.0
3505	Rowan	S	10	240										N		1	1.5	2	3	1.5-S	2	SM	Crown shape distorted due to group pressure.	None	20+	B2	26.1	2.9
3504	Birch	M(a)	14	360	360									N		3	5	5	4	2.0-E	3	M	Bifurcate at base. Fallen tree hung up in crown.	None	20+	B2	117.3	6.1
T2	Alder	S	14	270										N		4	6	0	3.5	2.5-E	1.5	EM	Crown shape distorted due to group pressure. Previous branch failure wounds in crown. Minor deadwood and branch dieback in crown. No long term potential.	None	10+	C2	33.0	3.2
3547	Alder	M(b)	14	220	200	220	220	200	220					N		3.5	4	6	4	2.0-S	1.5	M	Multi-stemmed at base. Minor deadwood and branch dieback in crown.	None	10+	C2	123.5	6.3
G3	Goat willow	M(a)	3.5	80	80									N		2	2	2	2	0-S	0	SM	Multi-stemmed at scrub.	None	10+	C2	5.8	1.4
3511	Goat willow	M(a)	15	300	370	180								N		6	6	5	6	0.5-W	0.5	M	Trifurcate at base. Previous branch failure wounds in crown. Minor deadwood and branch dieback in crown. Small stem cavities and crevices.	None	10+	C1	117.3	6.1
G4	Willow	M(a)	14	250	250									N		5	5	5	5	0-S	0	M	Small group of trees on northern side of forestry access track. Previous branch failure wounds in crown. Minor deadwood in crown.	None	10+	C2	56.6	4.2
3526	Willow	M(a)	15	220	200									N		4	4	3	3	1.0-N	0.5	EM	Bifurcate at base. Minor deadwood in crown. Crown shape distorted due to group pressure.	None	20+	B2	40.0	3.6
3525	Birch	S	13	190										N		2	2.5	3	3.5	4.5-S	5	SM	Crown shape distorted due to group pressure. Minor deadwood in crown.	None	20+	C1	16.3	2.3
3527	Willow	M(a)	13	140	160	180	200	210						N		6	4	5	2.5	2.5-S	2	M	Multi-stemmed at base. Crown shape distorted due to group pressure. Minor deadwood in crown.	None	20+	B2	73.2	4.8
3524	Willow	S	14	320										N		4	4.5	4.5	3	2.5-E	2	EM	Crown shape distorted due to group pressure. Minor deadwood in crown.	None	20+	B2	46.3	3.8
3523	Willow	S	12	260										N		3	2.5	1.5	2	2.5-N	2	EM	Crown shape distorted due to group pressure. Ivy clad stem.	None	20+	B2	30.6	3.1
3514	Willow	M(b)	14	180	180	180	180	180	180	180	180			N		5	5	5	5	0.5-S	2	EM	Multi-stemmed at base. Minor deadwood in crown. Crown shape distorted due to group pressure.	None	20+	B2	117.3	6.1
3512	Willow	M(a)	16	140	180	220	280							N		5	2	5	3	2.5-S	2.5	EM	Multi-stemmed at base. Minor deadwood in crown. Crown shape distorted due to group pressure. Included bark at branch unions.	None	20+	B2	80.9	5.1
3515	Willow	M(a)	15	160	200	200								N		2	5	4	5	2.5-W	2.5	EM	Trifurcate at base. Minor deadwood in crown. Crown shape distorted due to group pressure.	None	20+	B2	47.8	3.9

Tree Ref No.	Species	Single or Multiple Stem (S or M)	Height (m)	Stem Diameter (mm) S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	Very Large Girth (Y / N)	Ancient, Veteran or Notable (A, V or N)	Branch Spread (m) N	E	S	W	Crown Clearance (m) (1)	(2)	Life Stage	General Observations (structural / physiological condition)	Preliminary Management Recommendations	Estimated Remaining Contribution (years)	Tree Quality Grading	Root Protection Area (m^2)	(radius in m)
3517	Willow	M(b)	16	220	220	220	220	220	220	220	220			N		5.5	7	5	7	2.5-N	2	M	Multi-stemmed at base. Previous branch failure wounds in crown. Minor deadwood in crown.	None	20+	B2	175.2	7.5
3516	Willow	M(a)	14	160	160									N		4	2	3	5	2.5-E	2	SM	Minor deadwood in crown. Crown shape distorted due to group pressure.	None	10+	C2	23.2	2.7
3509	Willow	M(a)	15	220	220	220	220	220	220	220	220	220		N		7	6	6	7	1.0-W	1.5	M	Multi-stemmed at base. Crown shape distorted due to group pressure. Minor deadwood in crown.	None	20+	B2	109.5	5.9
3508	Sycamore	M(a)	15	180	210									N		3	4	3	4	1.0-E	1	SM	Bifurcate at base. Crown shape distorted due to group pressure.	None	20+	B2	34.6	3.3
3522	Willow	M(a)	15	250	160									N		3	5	6	4	2.5-S	3	EM	Multi-stemmed at base. Crown shape distorted due to group pressure. Minor deadwood in crown. Small quantity of major deadwood in crown. Previous branch failure wounds in crown.	None	20+	B2	39.9	3.6
3521	Willow	M(a)	15	200	180	120	100							N		3	1	5	5	2.5-W	3	EM	Trifurcate at base. Crown shape distorted due to group pressure. Minor deadwood in crown.	None	20+	B2	43.8	3.7
3519	Birch	S	13	180										N		2	1	1	2	5.0-W	5	SM	Crown shape distorted due to group pressure.	None	20+	B2	14.7	2.2
3529	Birch	S	15	250										N		4	3	3	3	2.0-W	3	EM	Crown shape distorted due to group pressure.	None	20+	B2	28.3	3.0
G5	Willow	M(a)	13	120	120	120	120	120						N		4	4	4	4	0-S	0	EM	Multi-stemmed at base. Restricted inspection due to access.	None	20+	B2	32.6	3.2
T6	Sycamore	S	16	460										N		6	5	4	6	2.5-N	1	M	Minor deadwood in crown.	None	20+	B2	95.7	5.5
T7	Alder	S	16	380										N		0.5	4	4	4	3.5-S	3	M	Crown shape distorted due to group pressure. Minor deadwood in crown. Small quantity of major deadwood in crown. In declining condition.	None	10+	C1	65.3	4.6
G8	Sycamore	M(a)	14	220	260	180								N		5	5	5	5	0.5-E	1	M	Minor deadwood and branch dieback in crown. Two Multi-stemmed trees in group. Located on edge of wooded area. Several stem bark wounds.	None	20+	B2	67.1	4.6
T9	Sycamore	M(a)	14	380	340									N		5	6	6	5	1.0-E	0.5	M	Bifurcate at 1m. Included bark at stem unions. Minor deadwood and branch dieback in crown.	None	20+	B2	117.6	6.1
G10	Willow	M(b)	12	140	140	140	140	140	140	140	140	140	140	N		6.5	6.5	6.5	6.5	0-W	0.5	M	Multi-stemmed at base. One tree in group partially prostate on ground. Minor deadwood in crowns.	None	10+	C2	88.7	5.3
3549	Willow	M(a)	12	240	240									N		5	3	3	5	1.0-W	1	EM	Minor deadwood in crown. Bifurcate at 1.5m.	None	20+	B2	52.1	4.1
3550	Willow	M(a)	12	230	140	240								N		5	6	4	3	2.0-S	2	EM	Bifurcate at base. Minor deadwood in crown. Crown shape distorted due to group pressure.	None	20+	B2	58.9	4.3
3569	Willow	M(a)	14	360	330									N		6.5	5	4	6	1.5-W	1.5	M	Bifurcate at 1.3m. Included bark at stem unions. Minor deadwood in crown. Crown shape distorted due to group pressure.	None	20+	B2	107.9	5.9
3570	Sycamore	S	15	290										N		5	5	3	4	2.5-N	0.5	EM	Crown shape distorted due to group pressure. Minor deadwood in crown.	None	20+	B2	38.1	3.5
3572	Sycamore	M(b)	16	240	260	140	140	120	120					N		6	6	3	5	0.5-N	1	M	Multi-stemmed at base. Crown shape distorted due to group pressure.	None	20+	B2	78.5	5.0
G11	Sycamore	M(b)	16	200	200	200	200	100	100					N		5	5	5	5	1.0-E	1	M	Multi-stemmed at base. Crown shape distorted due to group pressure. small linear group of trees in wooded area.	None	20+	B2	75.4	4.9
3576	Willow	M(a)	16	380	280	300	270							N		6.5	6.5	6	6	0-E	0	M	Previous branch failure wounds in crown. Partially prostate on ground. Minor deadwood in crown. Multi-stemmed at base	None	10+	C1	174.5	7.5
3575	Willow	S	15	890										N		6	5	5	6	0-N	0	OM	Previous branch failure wounds in crown. Partially prostate on ground. Bifurcate at 1.5m. Various small cavities in crown.	None	10+	C1	358.4	10.7
3574	Willow	M(a)	13	440	380	300	360	260						N		6.5	9	8	8	0-E	0	OM	Multi-stemmed at base. Included bark at stem unions. Previous branch failure wounds in crown. Partially prostate on ground. Stem failure at included unions. Recently exposed by clear felling of adjacent forestry plantation. Progressive collapse evident.	None	<10	U	282.9	9.5
3568	Willow	M(a)	13	260	190									N		3	3	3	4	4.0-N	4	M	Bifurcate at 1m. Minor deadwood in crown. Crown shape distorted due to group pressure.	None	20+	B2	46.9	3.9
3551	Willow	S	13	350										N		2	3.5	3.5	4	4.0-S	4	M	Bifurcate at 2m. Crown shape distorted due to group pressure. Minor deadwood in crown.	None	20+	B2	55.4	4.2
3552	Willow	S	13	340										N		1	2.5	5	5	4.0-W	4	M	Minor deadwood in crown. Crown shape distorted due to group pressure.	None	20+	B2	52.3	4.1

Tree Ref No.	Species	Single or Multiple Stem (S or M)	Height (m)	Stem Diameter (mm) S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	Very Large Girth (Y / N)	Ancient, Veteran or Notable (A, V or N)	Branch Spread (m) N	E	S	W	Crown Clearance (m) (1)	(2)	Life Stage	General Observations (structural / physiological condition)	Preliminary Management Recommendations	Estimated Remaining Contribution (years)	Tree Quality Grading	Root Protection Area (m^2)	(radius in m)
3553	Willow	M(a)	13	300	300									N		2.5	3.5	4	4	1.0-E	2	M	Minor deadwood and branch dieback in crown. In declining condition. Crown shape distorted due to group pressure.	None	10+	C2	81.4	5.1
3556	Willow	M(b)	14	240	240	240	240	240	240	240	240	240	240	N		7	7	7	7	1.0-W	1.5	OM	Multi-stemmed at 1m. Minor deadwood in crown. Previous branch failure wounds in crown.	None	20+	B2	260.6	9.1
G12	Willow	M(b)	15	200	200	200	200	200	200	200				N		6	6	6	6	0-S	0	M	Multi-stemmed at base. Crown shape distorted due to group pressure. Small group of circa 8 trees on edge of wider wooded area.	None	20+	B2	126.7	6.3
3558	Willow	S	15	480										N		4	2	4	6	1.5-S	2	M	Crown shape distorted due to group pressure. Minor deadwood in crown. Bifurcate at 2m.	None	20+	B2	104.2	5.8
3557	Willow	M(a)	15	180	240									N		2	2	6	4	2.5-S	2.5	M	Minor deadwood in crown. Crown shape distorted due to group pressure.	None	20+	B2	40.7	3.6
G3560	Willow	M(a)	15	180	240									N		4	4	4	4	1.0-S	1	M	Small group of three trees. Crown shape distorted due to group pressure. Minor deadwood in crown. Multi-stemmed at base.	None	20+	B2	40.7	3.6
3561	Willow	M(a)	15	190	150	260								N		3	4	4	3	2.0-S	1	M	Previous branch failure wounds in crown. Minor deadwood in crown. Crown shape distorted due to group pressure. Multi-stemmed at base.	None	10+	C2	57.1	4.3
3563	Willow	M(b)	15	270	270	210	260	230	340					N		5	6	6	5	1.0-E	0.5	M	Minor deadwood in crown. Crown shape distorted due to group pressure. Multi-stemmed at base.	None	20+	B2	188.2	7.7
3554	Willow	M(a)	15	340	300	280	280							N		3	6	6	4	2.5-S	2	M	Multi-stemmed at base. Minor deadwood in crown. Crown shape distorted due to group pressure.	None	20+	B2	164.0	7.2
3564	Willow	M(a)	15	460	420									N		6	4	8	8	2.5-W	3	OM	Bifurcate at 0.5m. Splitting at included union. No long term potential.	None	<10	U	175.5	7.5
3565	Willow	M(b)	12	180	180	180	180	180	180	180	180	180	280	N		4	5	6	5	0.5-S	1	OM	Multi-stemmed at base. In declining condition. No long term potential. Minor deadwood in crown. On edge of wooded area, recently exposed by forestry works.	None	<10	U	163.3	7.2
3566	Willow	M(b)	12	200	200	200	200	200	200	200				N		5	4	3	5	2.0-W	2.5	M	Minor deadwood in crown. Crown shape distorted due to group pressure. Multi-stemmed at base. Previous branch failure wounds in crown.	None	20+	B2	126.7	6.3
3573	Willow	M(a)	13	280	300									N		5	9	3	5	2.5-N	1	M	Bifurcate at base and 1.5m. Both unions at 1.5m have failed. Collapsing tree. No long term potential.	None	<10	U	76.2	4.9
G13	Willow, Sycamore	M(a)	13	140	140	140	140	140						N		4	4	4	4	2.0-S	2	EM	Scattered under-storey trees within wooded area. Minor deadwood in crown. Crown shape distorted due to group pressure.	None	20+	B2	44.3	3.8
3582	Larch	S	16	380										N		3.5	2.5	3.5	3.5	1.5-N	1	EM	Minor deadwood in crown.	None	20+	B2	65.3	4.6
3583	Willow	M(a)	14	280	240	150	130	150						N		3	2	4	4	2.0-W	2.5	EM	Multi-stemmed at base. Minor deadwood in crown. Crown shape distorted due to group pressure.	None	20+	B2	89.5	5.3
G14	Willow	M(a)	14	220	220	220	220							N		4	4	4	4	2.0-N	1.5	EM	Multi-stemmed at base. Minor deadwood in crown. Crown shape distorted due to group pressure.	None	20+	B2	87.6	5.3
3586	Willow	M(a)	14	320	220	180	160	140						N		2	3	6	8	0.5-W	0.5	M	Multi-stemmed at base. Previous branch failure wounds in crown. Heavily suppressed specimen of poor form. No long term potential.	None	<10	U	103.3	5.7
3589	Pine	S	14	300										N		2	1	2.5	3	7.0-W	7	M	Extensive minor deadwood in lower crown. Crown shape distorted due to group pressure.	None	10+	C1	40.7	3.6
3591	Willow	S	12	320										N		5	4	2	6	2.5-E	3.5	M	Minor deadwood in crown. Crown shape distorted due to group pressure. Previous branch failure wounds in crown.	None	10+	C1	46.3	3.8
3577	Willow	M(a)	14	160	160	220	220							N		3.5	4	3	4	2.0-E	2	EM	Multi-stemmed at base. Crown shape distorted due to group pressure. Minor deadwood in crown.	None	20+	B2	67.0	4.6
G3579	Pine	S	16	450										N		4	4	4	4	0.5-E	1	M	Group of two trees. Minor deadwood in crown. Crown shape distorted due to group pressure.	None	20+	B2	91.6	5.4
T15	Larch	M(a)	16	350	350									N		4	4	4	4	1.5-E	2	M	Dead.	None	<10	U	110.8	5.9
G16	Willow	M(a)	4	75	75	75	75	75						N		2.5	2.5	2.5	2.5	0-S	0	SM	Multi-stemmed at base.	None	20+	C2	12.7	2.0
G17	Willow	M(b)	12	150	150	150	150	150	150					N		4	4	4	4	0-S	0	SM	Multi-stemmed at base. Minor deadwood in crown. Crown shape distorted due to group pressure.	None	20+	B2	61.1	4.4
G18	Willow, Birch	M(a)	12	150	150	150	150							N		4	4	4	4	0-S	0	EM	Group of scattered trees of similar age class, condition and size forming closed canopy area. Trees within group typically exhibit crown shape distortion due to group pressure and have minor deadwood in crowns.	None	20+	B2	40.7	3.6

Tree Ref No.	Species	Single or Multiple Stem (S or M)	Height (m)	Stem Diameter (mm) S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	Very Large Girth (Y / N)	Ancient, Veteran or Notable (A, V or N)	Branch Spread (m) N	E	S	W	Crown Clearance (m) (1)	(2)	Life Stage	General Observations (structural / physiological condition)	Preliminary Management Recommendations	Estimated Remaining Contribution (years)	Tree Quality Grading	Root Protection Area (m^2)	(radius in m)
G19	Willow, Birch	M(a)	12	150	150	150	150							N		5	5	5	5	0-S	0	EM	Linear group of trees along edge of wider tree covered area. Trees within group typically exhibit crown shape distortion due to group pressure and have minor deadwood in crowns.	None	20+	B2	40.7	3.6
G20	Alder, Willow, Hawthorn, Birch	M(a)	14	200	200	200								N		4.5	4.5	4.5	4.5	0-S	0	EM	Group of scattered trees of similar age class, condition and size forming closed canopy area. Trees within group typically exhibit crown shape distortion due to group pressure and have minor deadwood in crowns.	None	20+	B2	54.3	4.2
T21	Rowan	M(a)	10	250	220									N		4	4	4	4	2.0-S	1.5	M	Bifurcate at base.	None	20+	B1	50.2	4.0
G22	Goat Willow	M(a)	5	80	80	80								N		4.5	4.5	4.5	4.5	0-S	0	SM	Multi-stemmed at base.	None	10+	C2	8.7	1.7
G23	Goat Willow, Silver Birch	S	12	380										N		6	4	5	5	1.5-N	1	EM	One fallen tree at edge of group.	None	20+	C2	65.3	4.6
W24	Larch, Spruce, Fir	S	18	350										N		4	4	4	4	2.0-S	2	EM	Area of plantation woodland adjacent to northern boundary of site.	None	20+	B2	55.4	4.2

Appendix 11: Tree Work Schedule

Tree No:	Species	Recommended Management Work
G16	Willow	Fell and remove sections marked red on AIAP (**Appendix 5**)
3508	Sycamore	Fell and remove.
3509	Willow	Fell and remove.
3511	Goat Willow	Fell and remove.
3516	Willow	Fell and remove.
3517	Willow	Fell and remove.
3530	Willow	Fell and remove.
3564	Willow	Fell and remove.
3565	Willow	Fell and remove.
3566	Willow	Fell and remove.
3573	Willow	Fell and remove.
3574	Willow	Fell and remove.
3577	Willow	Fell and remove.
3586	Willow	Fell and remove.
3589	Pine	Fell and remove.
G13	Various	Fell and remove section identified in red on AIAP in **Appendix 5**.
G14	Willow	Fell and remove section identified in red on AIAP in **Appendix 5**.
G17	Willow	Fell and remove section identified in red on AIAP in **Appendix 5**.
G18	Various	Fell and remove section identified in red on AIAP in **Appendix 5**.

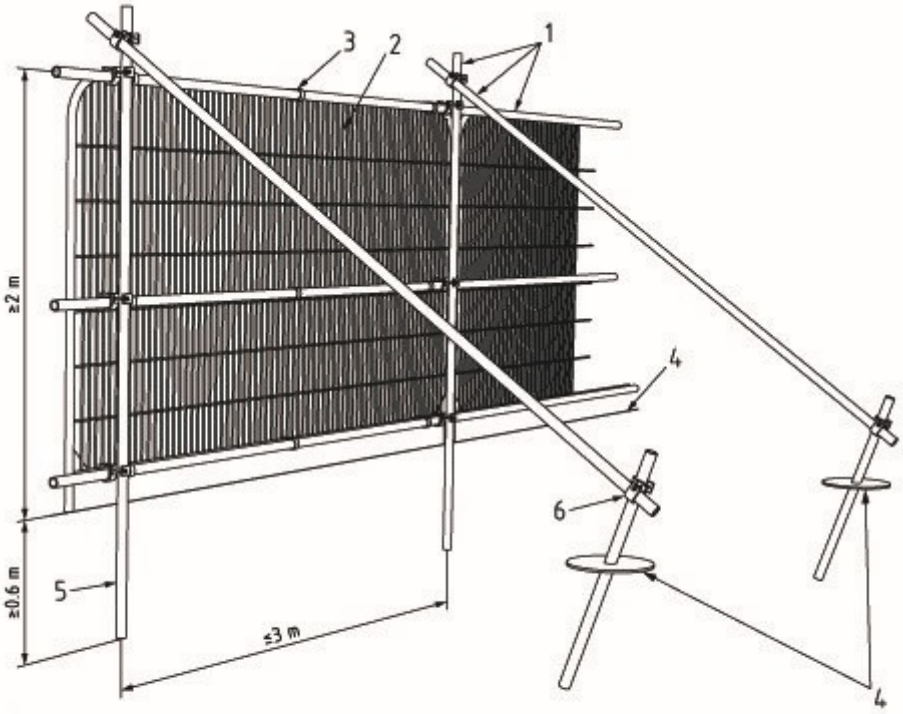
Accompanying Notes:

- All tree work and felling to be carried out in accordance with BS 3998 (2010) 'Tree work - Recommendations', current industry guidelines and best practice, and all relevant Health & Safety standards.

- All operatives to be appropriately qualified, skilled, and adequately insured, for proposed tasks.
- All tree work and felling must comply with The Wildlife and Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000.
- Trees identified for removal are not to be felled until full planning permission has been granted, which specifically includes plans detailing the trees to be felled as being removed.

Appendix 12: Example Tree Protection Barrier

See following page.



Key

1 Standard scaffold poles

2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels

3 Panels secured to uprights and cross-members with wire ties

4 Ground level

5 Uprights driven into the ground until secure (minimum depth 0.6 m)

6 Standard scaffold clamps

Appendix 13: Example Tree Protection Barrier Sign

See following page.

KEEP OUT

Tree Preservation Area

Appendix 14: Example Tree Stem Protection

Appendix 15: Key Contacts

	Name	Main Contact and Details
Site Manager	TBC	TBC
Local Authority	Rhondda Cynon Taf Council	Headquarters The Pavilions Cambrian Park Clydach Vale Tonypandy Mid Glamorgan CF40 2XX T: 01443 425005
Arboricultural Consultant	ADAS	Ed Lusk RSK ADAS Limited Abbey Park Humber Road Coventry CV3 4AQ 07503 166016 Ed.lusk@adas.co.uk