

Arboricultural Report –Tree and Hedgerow Protection and Replacement Plan

At

Proposed residential development of up to 5 dwellings,
formation of vehicular access and access road and all
associated works (all matters reserved) at Land adjacent to
Church House Farm, Llanwnnog, Caersws.

Reported Date: 19th April 2023

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Independent Consultant

1.0 Summary of Site and Key points of Survey Report

- The Hedgerow recorded in the report is located within the area of land at the proposed development of up to 5 dwellings at land adjacent to Church House Farm, Llanwnnog, Caersws. The hedge has been assessed in relation to Condition 14 of the Town and Country Planning Act 1990 - Prior to commencement of development a Tree and Hedgerow Protection and Replacement Plan in accordance with BS:5837:2012 shall be submitted to the Local Planning Authority and implemented as approved and maintained thereafter.
- A detailed Topographic Map was supplied by the Land Agent for the purpose of the survey and report and used for reference to inform the Arboricultural report.
- The Hedge at the site is in general good health and is situated at the southern boundary of the proposed development. There is an Ash tree situated in the North East corner but is outside the proposed boundary of the development.
- Retention and protection of the existing hedge is recommended before, during and after development. This will provide visual amenity, softening or complementing the effect of the built environment, and adding maturity to new developments. It will display seasonal change and providing opportunities for wildlife in built-up areas and it will make places more comfortable in tangible ways by contributing screening and shade, reducing wind speed and turbulence, intercepting snow and rainfall, and reducing glare.
- Hedge protection using suitable barrier fencing is prescribed in this report, using specifications and methods referenced in BS 5837:2012.

2.0 Introduction to the report

I have been asked to complete a Hedgerow protection plan and report by Arbor Vitae to consider the condition of the hedgerow at the above-named property. I have been tasked to assess the hedge and other notable features on the site in relation to potential development and future use of the area for residential dwellings.

A site assessment was conducted on the 24th April 2023. The weather was good and sunny, around 14 degrees Celsius. Qualitative and Quantitative data was gathered in relation to the hedgerow and its condition.

Please note that any reference in the form of maps and hedge location in this report are indicative and descriptive only. At the time, only a supplied topographic map was produced and no georeferenced map was given.

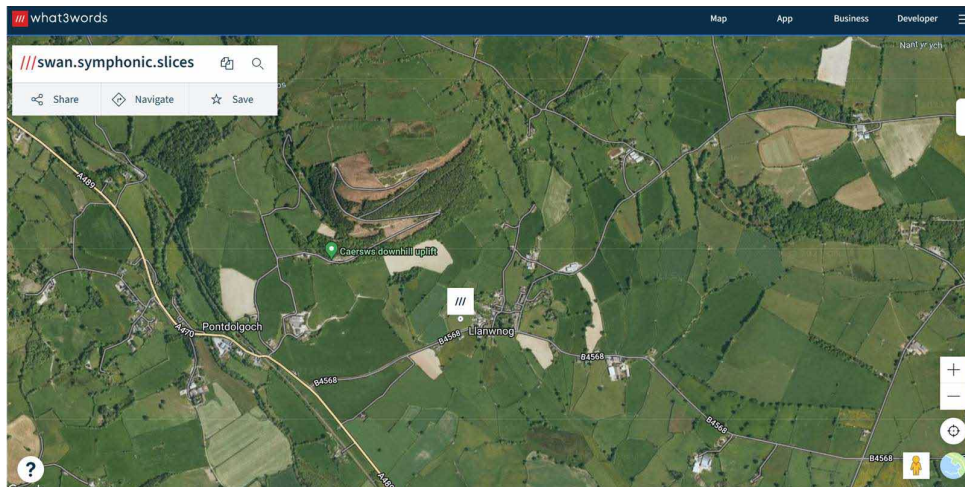
The assessment of the trees and any other factors are of a preliminary nature. The trees were inspected based on the Visual Tree Assessment (VTA) method as developed by Mascheck and Breloer (1994) and Mascheck (2007). The trees were inspected from ground level with no climbing inspections undertaken. It is not always possible to access every tree and as such some measurements must be estimated. No samples have been removed from the site for analysis.

A core part of a tree inspection in relation to development is the assessment of risk associated with trees/hedgerows in close proximity to the persons and property. Most human activity involves a degree of risk and these risks being accepted, if the benefits are perceived to be equal.

In general, the risk relating to trees tends to increase with the age of the trees concerned, as do the environmental benefits.

3.0 Site Location

The site is located west of the village of Llanwnnog, situated off the B4568.



The site currently is grazing and grassland with no real tree features on or around the site. The Hedgerow situated to the south of the area is the only real feature around.

The soil here comprises freely draining slightly acid loamy soils (UK Soil Observatory).

Landis describes the soil type here as freely draining slightly acid loamy soils as described in Soilscape 6. The texture of the soil is described as Loamy (Landis).

It is worth noting that no specific soil sampling was undertaken when on site as part of this survey.

The description given was obtained from opinion of likely soil types. This information is not comprehensive and therefore any decisions taken with regards to the management on site should be based on specific and detailed soil analysis.

4.0 Hedgerow Survey and Condition Assessment

The Hedgerow was assessed from ground level only. This assessment detailed the hedge condition and approximate age. The hedge consists of beech *Fagus sylvatica*. Approximate age is no older than fifteen years old. It is good condition and at the time of the survey was just coming into leaf.

The central area of the site contains no tree cover. Hedge and tree cover at the site is primarily restricted to the southern boundary and outer margins of the of the site. There is an Ash tree which lies just outside of the development area.

The hedge contains gaps which when the trees are in full leaf could not easily be seen.

The Ash tree fell outside of the planned development area and so was not assessed.

5.0 Recommendations

The hedge is young and has years of longevity. When development begins it should be protected using barriers, as to not damage it.

As the Ash tree is outside of the proposed development, it won't be affected but it should be given consideration when planning development operations.

6.0 Arboricultural Impact Assessment

6.1 Development Proposal

The map plan which shows the development of up to five dwellings will not affect the hedgerow on the site. An indicative plan map was made available at the time of the survey to inform the arboricultural report.

The site is primarily grass land in its current form with only the hedgerow present. It is therefore assumed that there will be no soil level changes close to the proximity of the hedgerow and its specified Root Protection Area (RPA).

Site access and details for the site compound, materials storage, soil stripping and stockpiling need to be considered in relation to the hedgerow's RPA in full accordance with the requirements of BS 5837:2012.

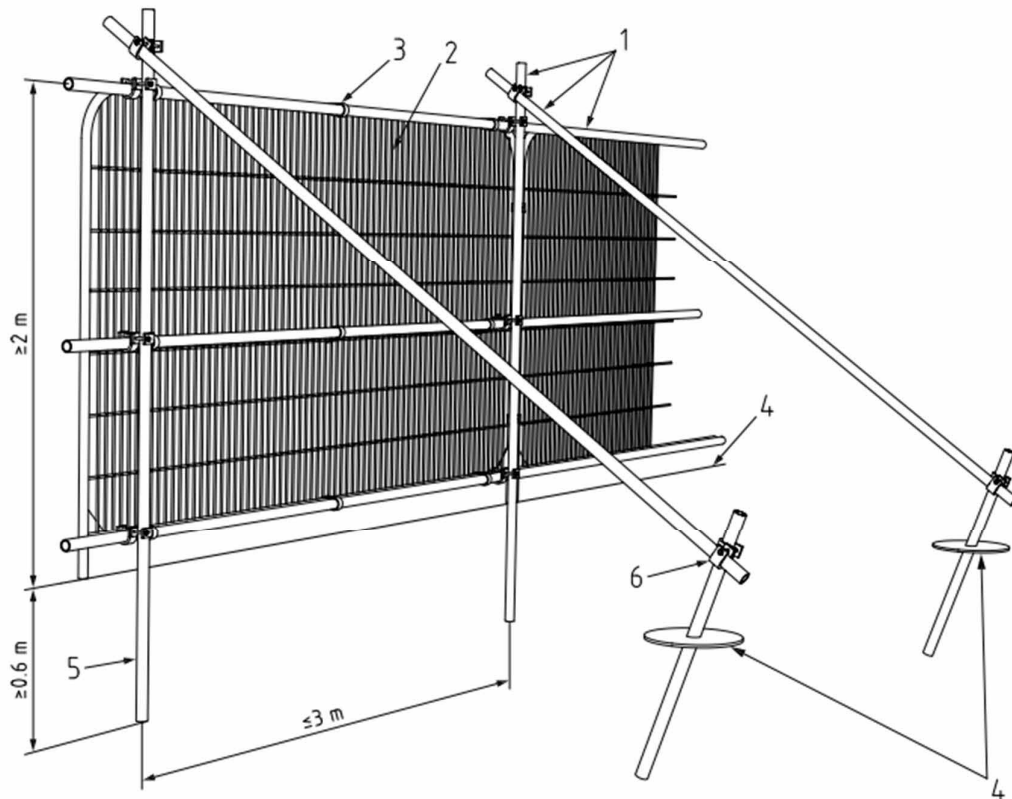
6.2 Requirement for barrier fencing

Protective fencing will be installed to protect the feature. This must be fit for purpose, in full compliance with the requirements set out in BS 5837:2012 (Figure 1 shows specification for barrier fencing).

Where all activity can be excluded from the RPA, vertical barriers should be erected to create a construction exclusion zone. Barriers should be maintained to ensure that they remain rigid and complete.

The barrier fencing should be situated at least 5 lineal meters away from the current line of the hedgerow.

Figure 1. Default specification for barrier fencing



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

7.0 Design Advice, Arboricultural Method Statement and Hedgerow Protection Plan

Secure the hedgerow and Root Protection Area

The hedgerow is to be retained and protected using robust barrier fencing as highlighted in figure 1 and attached proposal map.

The fencing must have all weather notices attached stating 'Construction Exclusion Zone – No Access'. The fence will remain in place for the duration of construction and development and will not be removed without consent from the LPA.

The location of a site compound should be determined with full recognition of the requirements to protect the RPA.

The storage of soil and building materials will not be stored within the RPA of the hedgerow, even if the proposed development is to be within the RPA. This limits compaction of any roots associated with the hedgerow. Any encroachment within this protection area will be with consent from the LPA.

Any facilities for the storage of oils, fuels or chemicals shall be sited on impermeable bases and surrounded by bunded walls. The volume of the bund compound shall be equivalent to the capacity of the tank, plus 10%. If there are multiple tanks, the compound should be at least equivalent to the capacity of the largest tank, or the combined capacity of the interconnected tanks, plus 10%. All filling points, vents and gauges and sight glasses shall be located within the bund. The drainage system of the bund shall be sealed with no discharge to any watercourse, land, or underground sections. All filling points and tank overflow pipe outlets should be detailed and discharge downwards into the bund.

All material storage facilities need to consider effects of sloping ground on the movement of potentially harmful liquid spillages towards or in protected areas.

As the Hedgerow is being retained there is no necessary remedial work required.

7.1 Tree works

If it is deemed necessary to undertake any cutting to the hedgerow in light of development then work must be carried out in line with BS 3998:2010 (Recommendations for Tree Works). An appropriately qualified, experienced, and insured arboricultural contractor should be sought to undertake the work.

It is not envisaged that soil level will threaten the hedgerow feature, should design plans change it is imperative appropriate measures must be taken to ensure prevention of detrimental effects on root systems.

7.2 Underground and overground services

At the time of writing this report, there were details of services obtained or proposals of such infrastructure. However, the following principles should be adhered to when planning for their installation.

It is proposed that all underground service runs will be placed outside the RPA of the trees on or adjacent to the site. Where it is not possible to do this, the proposed length infringing the RPA will be hand dug 'broken trenches' to ensure the maximum protection of the trees' roots. The trenches may also be excavated using an air spade, or trenchless technology can be employed if this methodology is considered appropriate by the relevant service company (thus allowing services to pass below and through the roots without the need for traditional excavation). If it is necessary to cut any small roots as part of any of these processes, they should be severed in such a way as to ensure that the final wound is as small as possible and free from ragged, torn ends.

All service providers (Statutory Authorities) will be consulted prior to commencement of works with the aim of minimising the number of service runs on the site.

All service runs/trenches where they encroach within the RPA of retained trees will be agreed with the LPA.

7.3 Reporting and Monitoring

In accordance with section 6.3 of BS 5837:2012, the site and associated development should be monitored regularly by a competent Arboriculturalist to ensure aspects of the planning permission are implemented. Furthermore, regular contact between the site manager and Arboriculturalist allows them to effectively deal with any advice on any tree related problems which may arise. This system should be auditable.

8.0 Recommendations

It is recommended that the measures detailed in the survey and this report are implemented to provide the retained hedgerow with the highest level of protection during development and construction.

Barrier fencing should be completed as per BS 5387:2012 and completed prior to any work starting on the development.

The recommendations outlined as part of this survey are to mitigate any problems that may be caused by trees in close proximity to the proposed development. Should these recommendations be overruled, this survey stands as an opinion of Adam Serling – independent consultant, and therefore any damage or injury caused by recommendations by this practice, to which the proposed schedule of work has been altered or the hedgerow damaged cannot be the responsibility of this practice.

9.0 Limitations and Qualifications

Unless specifically mentioned, the report is concerned only with an above ground inspection. No below ground inspections were carried out as this was not detailed in the specification of work.

The validity, accuracy and findings of this report will be directly related to the accuracy of the information made available prior to and during the inspection process. No checking of independent third-party data was undertaken. Adam Serling will not be responsible for the recommendations within this report where essential data is not made available or are inaccurate.

This report will remain valid for one year from the date of inspection subject to the recommendations specified within being adhered to. It must also be appreciated that recommendations proposed within this report may be superseded by extreme weather, or any other unreasonably foreseeable events. However, if any additional alterations to the property or soil levels are carried out and/or further tree works undertaken other than specified within the report, it will become invalid and a new tree inspection strongly recommended.

It will be appreciated, and deemed to be accepted by the client and their insurers, that the formulation of the recommendations for the management of trees will be guided by the following: -

1. The need to avoid reasonably foreseeable damage.
2. The arboricultural considerations - tree safety, good arboricultural practice (tree work) and aesthetics. The client and their insurers are deemed to have accepted the limitation placed on the recommendations by the sources quoted in the attached report. Where sources are limited by time constraints or the client, this may lead to an incomplete quantification of the risk.

Assessment and report written by

Adam Stirling MArborA – Independent Consultant



Report Dated 07th May 2023

Sources:

BSI (2012) BS5387:2012 *Trees in relation to design, demolition and construction – recommendations*

BSI (2010) BS3998:2012 *Treework – recommendations*

Mattheck and Breloer (1994) *The body Language of trees*

National Tree Safety Group (2011 and updates) *Common sense risk management of trees*

Appendix 1











