



Owl Cottage, Bangor-On-Dee, Wrexham, LL13 0DB.

Arboricultural Report

November 2021



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TCP/4495/Y/100	Arboricultural Survey
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Chapter 1 Introduction

1.01

ACS Consulting is instructed by Ms. M. Humphries to report on trees and the implications for the proposed development at Owl Cottage, Millbrook Lane, Bangor-On-Dee, Wrexham, LL13 0DB. The assessment and report was undertaken by Ian Murat, Registered Consultant of the Arboricultural Association.

1.02

In accordance with guidance on information requirements and validation for planning applications, this report fulfils the recommended national list criteria for tree survey/arboricultural information. More specifically, it contains the following:

- A full tree survey to the requirements of BS5837 (2012) Trees In Relation To Design, Demolition and Construction – Recommendations.
- A plan showing tree survey information, retention categorisation and root protection areas,
- An assessment of the arboricultural implications of development detailing trees to be retained/removed and appropriate protection measures,
- A Heads of Terms Arboricultural Method Statement detailing a set of agreed principles for tree protection, implementation and phasing of works (where applicable).

1.03

The site was visited during October 2021. A survey of the trees was completed recording; species type, age, height, crown spread, diameter-at-breast-height and, condition.

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Chapter 2 Background

2.01 The Site

The site is described in detail in the Planning, Design and Access Statement. In simple terms, the site is a cottage with outbuildings in a rural location on the outskirts of Wrexham. (Figure 1).

2.02 Statutory Protection/Planning Policies

The current policy documentation consists of the Wrexham Local Development Plan 2 (LDP2) 2013 to 2028; Local Planning Guidance Notes No 17 - Trees and Development and; Planning Policy Wales. The application site is not located within a Conservation Area. The presence of Tree Preservation Orders has not been confirmed.

2.03 Soils

BS 5837 – 2012 requires a basic assessment of the soils on site. An examination of the British Geological Survey site does not record the superficial deposits. It records the Bedrock Geology as: Till, Devensian - Diamicton. Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by ice age conditions (U).

The Cranfield Soil and Agrifood Institute Soilscales viewer shows soils at the site to be slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils. [sic]

2.04 Topographical Survey

The arboricultural survey is based on the supplied OSMM survey.



Figure 1 – June 2018 Google Earth

Chapter 3 Tree Survey

3.01

I have identified one tree.

3.02

The tree data can be found at Appendix A. There is no requirement in BS 5837 to repeat the details of the constraints information save for confirming that the tree was surveyed for species type, age, height, crown spread, diameter-at-breast-height, condition, and its suitability for retention from ground level. The height was measured with a digital Hypsometer and the diameter taken with a diameter tape to give an average stem measurement. Canopy spreads have been measured at the cardinal points or where they significantly extend in other directions.

Chapter 4 Development Implications

4.01 Application

The development is described in the planning design and access statement. In simple terms, it is an application to create a Manège.

4.02 Development Implications

Loss for Development

None. The application retains the site's principal arboreal specimen.

Retained trees that may be affected by disturbance

The footprint of the Manège is located within the RPA of the oak. The installation of the Manège involves a minimal excavation into the RPA of the oak. Oak are noted as being deep rooted and are considered to be moderate/good in their tolerance to construction stress. The tree has a good foliage density and vigour. Remedial measures in the form of vertical mulching can be undertaken in the RPA to enhance tree health and compensate for any potential root loss due to the excavations. The construction access will be from Millbrook Lane. The construction access has no implications for tree retention.

Pruning

No tree works are required for construction.

4.03

The over-arching policy guidance in respect of the site is that contained within the Wrexham Local Development Plan 2 (LDP2) 2013 to 2028; Local Planning Guidance Notes No 17 - Trees and Development and; Planning Policy Wales.

In accordance with policy, the proposed scheme conserves trees which contribute positively to the visual amenity and environmental value of the area.

The development accords with the policies and guidance of the council and the Welsh Government. The development is based on best arboricultural practice that ensures the tree is retained. The application recognises that the retention of existing trees can add maturity to the development and enhance its visual quality and character. The development is well designed and it is considered to have a symbiotic relationship with the oak.

Chapter 5 Conclusions

5.01

The application is described in detail in the planning, design and access statement.

5.02

The development successfully retains the tree. The use of advanced tree protection measures including the use of vertical mulching ensure the tree is retained. The development has been so located to have a satisfactory relationship with the retained tree.

5.03

A draft method statement is appended to demonstrate the scheme is feasible. Certain matters listed therein may alternatively be addressed satisfactorily by means of a condition(s). This requires detailed discussions with the LPA on the principle that conditions should always be used in the first instance as per government guidance and that contained in BS 5837 – 2012 Table B.1 Delivery of tree-related information into the planning system; the method statement fulfils the recommended criteria for arboricultural information.

Appendix A

Contents

Key

BS 5837 2012

Tree data

KEY

Age	Y – Young: Out-planted trees that have not yet established SM – Semi-mature: Established trees up to 1/3 of expected height and crown EM – Early mature: Between 1/3 and 2/3 of expected height and crown M – Mature: Between 2/3 and full expected height and crown FM – Fully mature: Full expected height and crown OM – Over mature: Crown beginning to break-up and decrease in size S – Senescent: Crown in advanced stage of break-up
Physiological Condition	Good – Very few defects a reasonable long life expectancy depending on age class Fair – Some defects giving the tree a shortened life expectancy Poor – Limited life with major problems
Structural Condition	Good – Very few defects Fair – Some defects rectifiable with minor tree surgery Poor – Significant defects rectifiable with major tree surgery or felling
#	Estimated dimensions.
(a)	Average stem diameter across a group of trees.
*	Tree subject to TPO.

Table 1 – Cascade chart for tree quality assessment

Category and definition	Criteria			Identification on Plan
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 U category trees (i.e. 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. <i>NOTE Category U trees can have existing or potential conservation value which might be desirable to preserve; see 4.5.7</i>			RED
	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 essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dormant 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)	GREEN
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.	BLUE
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 benefits	GREY

Tree Ref No.	Species	Height	Stem Diameter	Branch Spread M				Height of Crown Clearance	Clear Branch Height	Age Class	Physiological Condition	Structural Condition	Comments/Preliminary Management Recommendations	Estimated Remaining Contribution Years	Category Grading
		M	MM	N	E	S	W	M	M						
T1	Oak	15	900	8	8	8	8	3	3	FM	Good	Good	A tree of moderate quality and value in the landscape.	20+	B1/2

Appendix B

Contents

Method Statement

Arboricultural Method Statement

Arboricultural Supervision

The general purpose is to ensure compliance with planning conditions. It is anticipated that arboricultural input is likely to be needed for the following operations:

- Pre-commencement meeting;
- Vertical mulching;
- Services (power, water, foul)
- Removal of protective measures.

All supervisory visits will be logged and a copy of the minutes circulated to all team members including the LPA. A number of the operations named above can be undertaken in a single visit.

The pre-commencement site meeting is to be held before any work is undertaken. All tree protection measures, haul routes, site storage, contractor parking, deliveries, working methods are to be freely discussed and agreed in writing. Initial site visits may be intense to ensure measures are implemented.

General site visits will be undertaken once the site is 'live' at intervals agreed with the team. Our role will be to initially to act in a compliance capacity to ensure the protective measures are fit for purpose and meet or exceed the council's requirements and the tree works are undertaken to the required standard. Once this has been completed, our role will be one of monitoring and 'troubleshooting'.

Targets

- Pre-commencement site meeting to agree roles, responsibilities and duties in relation to tree protection. Details to be minuted and distributed.
- Appointment of an Arboricultural Consultant to oversee works.

Arboricultural Method Statement

Vertical Mulching:

Work area to be marked out.

Targets

- Use a hand-held auger to create holes that are between 50 and 75 millimetres in diameter and drilled at around 600-millimetre centres. The holes should be arranged in a grid pattern under the tree canopy or the RPA whichever is the greater. They should be drilled to a depth of around 300/350 millimetres.
- Dispose of the soil dislodged by the auger and fill each hole with a diluted liquid fertiliser.
- The liquid fertiliser used and dilution rate (1:100 or 1:50) will depend on the results of a soil nutrient analysis.
- Once the liquid fertiliser has drained away refill each hole with the following blend of fresh soil:
- Biochar (5%):John Innes Soil No 2 or 3 (50%):Multi-Purpose Compost (40%): Slow release (6-12 month) inorganic or organic fertiliser (5%).

Arboricultural Method Statement

General Precautions

The retention of trees requires a number of general precautions to be taken. Compliance is to be maintained on site by the Arboricultural Consultant. The site visits are detailed at criterion 1 – Timing of Works.

Targets

- Spoil from the foundation pits or other excavations shall not be placed within the Construction Exclusion Zone.
- No materials, equipment, spoil or washout water may be deposited, stored or parked within the Root Protection Area/ Construction Exclusion Zone.
- On-site inspections to be undertaken by the Arboricultural Clerk of Works with the Arboricultural Consultant visiting during critical operations. The aim of the visits is to maintain on-going liaison with all personnel involved in the site development, Local Planning Authority and its Tree Officer.
- Any defects requiring rectification shall be notified to the Contractor/Site Manager/Arboricultural Consultant and the client.
- A site logbook for tree protection measures is kept to record all stages of the development from the erection of the protective fencing, right through to the completion of the project. This will be made available to the Arboricultural Consultant and the Local Planning Authority, if required, to show evidence of continuous site monitoring.

Protection and Emergency Procedure/Contacts

Adherence to the method statement, appointment of the Arboricultural Consultant and their involvement, at the critical demolition and construction phases, should negate any incident. The contact page details those personnel who should be contacted if an incident involving a retained tree should take place.

Targets

- Spill kit available.
- On site fuels to be located away from RPA/CEZ and contained in a bunded tank at 110% capacity.
- All incidents involving trees to be reported by telephone and email.
- Bunded storage of oil/fuels.
- Refuelling points for machinery at distance to the watercourse.
- Use of drop trays under plant/machinery overnight.
- Availability of spill kits on site – and training of site staff in their use.
- No excavation during periods of heavy rain.
- Regular maintenance and inspection of plant – engines and hydraulic systems.

Arboricultural Method Statement

Contact List

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Design	TBA			
Project Manager	TBA			
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