Leigh Ecology Ltd

Protected Species and Habitat Surveys

Willington Lodge,
Horseman's Green,
Whitchurch,
SY13 3BZ.

On Behalf of Mr. and Mrs. Morris

Green Infrastructure Proposals

Report Number	WILL/02-2025
Author	R. Leigh
Date	21st June 2025
First Check	J. Leigh
Final Technical Check	C. Evans

Office 01606892032 Mobile 07815711678
Directors R S Leigh & J J Leigh. 8 Hall Drive, Marston, Northwich, Cheshire CW9 6DT

INTRODUCTION

Leigh Ecology Ltd have been commissioned by Mr. and Mrs. Morris of Willington Lodge, Wrexham, to undertake a Green Network Assessment on planning proposals for a barn conversion at Willington Lodge, Horseman's Green, Whitchurch.

This Document looks to provide an assessment of green networks and biodiversity gain, in relation to the development proposals on land at Willington Lodge, and to comply with the updated National Planning Policy for Chapter 6 of Planning Policy Wales.



Figure 1: Phase 1 Habitat map of the proposal site – pre works.

PROPOSALS

The green infrastructure proposals will be looking to increase the habitat diversity and structure on the site with the provision of native hedgerow and trees. Some Barn swallow nest cups located within the stables are also proposed. Two bat boxes are proposed on the gable end of the barn building.

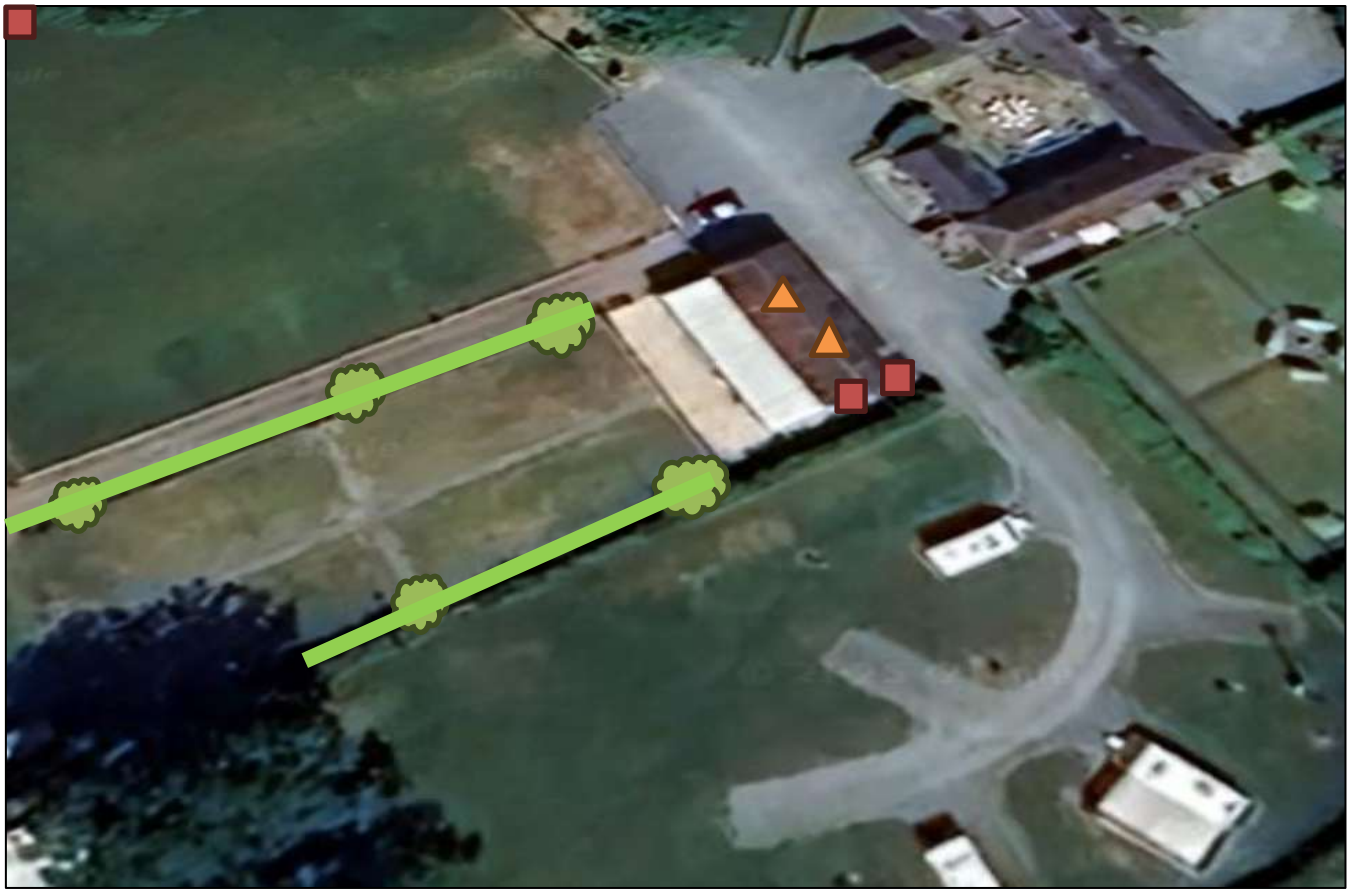
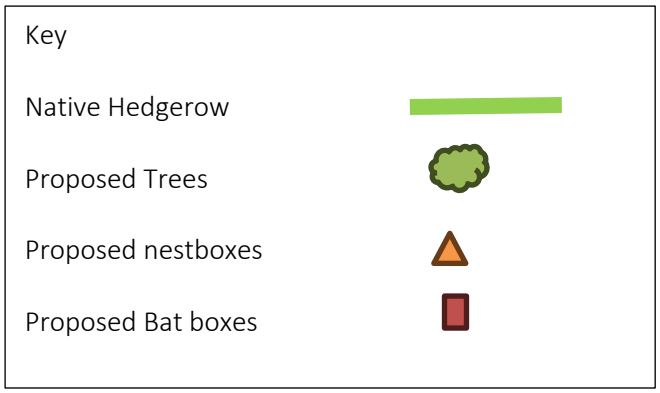


Figure 2: The proposed green network for the planned development site.



HEDGE PLANTING

The Native Hedgerow planting is located to the northwest of the site alongside the lane, as shown on figure 2 above.

The hedgerow will be planted and managed in line with the guidance provided below in this report.

It is also proposed that the hedge row to the south is strengthened by new planting to plug gaps and reinforce its features.

TREE PLANTING

Figure 2: Illustrates several tree clusters around the site. It is proposed that the tree planting provides a long-term positive impact on local landscape and green network, as this will line to the open fields and copses, beyond located to the southeast of the site.

Tree Species	Number proposed
Oak	2
Fruit – Apple/Pear/ Cherry	3

Table 1: Proposed Tree Plan

The proposed tree planting is in areas around the grounds of the development, this will provide cover, nesting and foraging habitat for a number of species.

BARN SWALLOW MITIGATION

It is proposed that 2 Barn Swallow nest cups are erected within the permanently open stable buildings as shown in figure 2.

Two Beaumaris Midi Woodstone bat boxes will be erected on the southern gable end of the barn building, as shown roughly in figure 2.



Figure 3: The current frontage of the barn set for conversion.



Barn Swallow nest cup as proposed.



BAT MITIGATION

In order to contribute to local biodiversity objectives, it is recommended that **two bat boxes** be installed on the building. These should be positioned:

- On an elevation facing away from any existing floodlighting.
- At a height of at least 3 metres.
- In locations sheltered from strong winds and direct sunlight, preferably near vegetation or tree lines, on south-east or south-west elevations.

These measures will enhance the long-term roosting potential of the site and align with national and local biodiversity policy, including the aims of the Environment Act 2021.





Bat Box Beaumaris Midi WoodStone x 2 as proposed

TECHNICAL NOTES

Native trees and woodland provide habitat for a variety of plants and animals as well as storing carbon which helps to combat climate change. Tree planting in groups is especially valuable.

Native trees which are considered to have biodiversity benefits are listed below.

- Alder, Beech, Birch (silver or downy), Blackthorn, Black poplar, Cherry (bird or wild), Crab apple, Dog wood, Field maple, Hawthorn, Hazel, Holly, Lime (common or small leaved), Oak (English or sessile), Rowan/mountain ash, Wild service, Willow (grey or goat) and Wych elm.

- The tree planting season is considered to be from November to March.
- Trees should be protected from damage from livestock or rabbits by fencing or guards if necessary.
- Watering may be required in periods of dry weather.
- The size and species of any trees should be clearly marked on plans.

Hedges are a better choice of boundary for wildlife than fences or walls, especially if native trees and shrubs are used. Hedges allow wildlife to move about between gardens and other spaces and provide feeding and breeding opportunities. If hedges exist but are patchy (defunct) hedgerow restoration is an option including some fencing as protection.

Choosing the Right Species

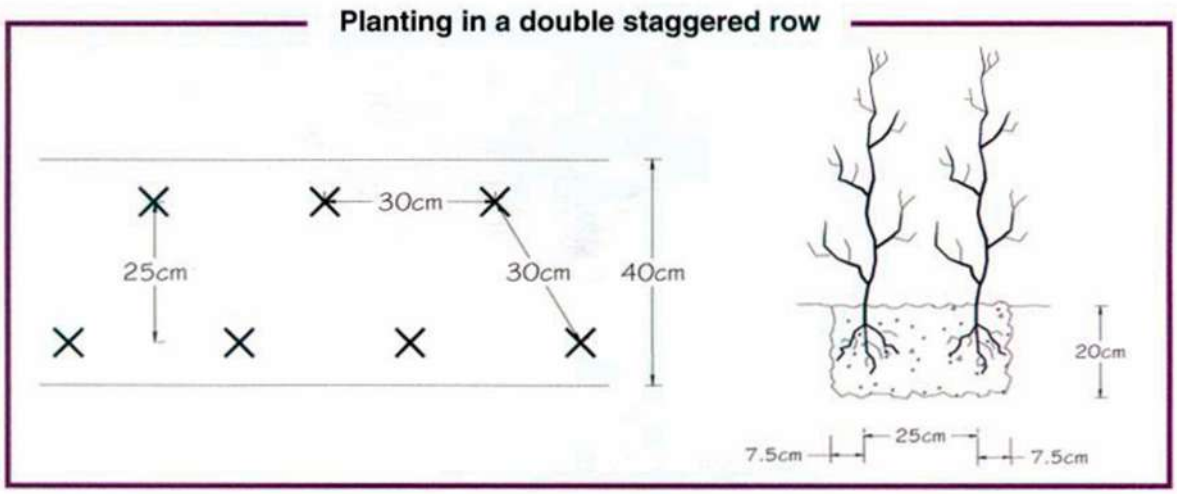
- Take a look at other hedgerows in the local area and choose species that you can see to retain local distinctiveness.
- Use a minimum of 5 species.
- Blackthorn (*Prunus spinose)* combined with Hawthorn (*Crataegus monogyna)* should make up 80-85% of your species, these can be integrated with any three from:
- 5-15% Hazel (*Corylus avellana)* and/or Field Maple *(Acer campestre);* and
- 0-5% of Holly (*Ilex aquifolium),* Field Rose *(Rosa arvensis),* Gooseberry (*Ribes uva-crispa),*
- Bird Cherry *(Prunus padus)* and Dog Rose *(Rosa canina).*
- Choose 60cm+ bare-rooted transplants or pot grown for some species such as Holly

Preparation

- The best time for planting is late autumn, after mid-November, although anytime between October and March is acceptable, provided the ground is not frozen or flooded.
- Create a 1m wide, weed free strip either by ploughing, digging or in limited cases, treating with a systemic herbicide.
- Ensure the bare roots of the plants do not dry out before planting.

Planting

- Plants should be supplied in accordance with the Horticultural Trade Association's National Plant specification and be sourced from a nursery that is a Member of the Horticultural Trades Association Nursery Certification Scheme.
- Plant in trenches large enough to take full spread of roots (20cm depth x 40cm width). Back fill with a previously prepared mixture of topsoil excavated from the pit, together with suitable compost and additional topsoil as required.



Maintenance

- Water the hedge for the first summer or any dry period in the 1st 12 months.
- Maintain weed control for at least 2 seasons.
- Replace any stock that dies within the first year.
- To encourage wildlife, trim the hedgerow no more than every 2nd year. This allows the shrubs and trees to produce more flowers, nuts and berries.
- Never trim the hedgerow between the beginning of March and the end of August when it would be harmful to invertebrates and nesting birds. The ideal time to trim the hedgerow is between January and February.