ARBOR VITAE

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GREEN INFRASTRUCTURE ASSESSMENT

CHETWYND GROVE

Arbor Vitae Environment Ltd, Lower Betton Farm, Cross Houses, Shrewsbury, Shropshire, SY5 6JD

Project name: **Chetwynd Grove, Bangor Road, Marchwiel, Wrexham, LL13 0TF**

Grid Reference: SJ37124720

Date: 06/12/2024

Prepared by: Phillipa Stirling BSc MSc ACIEEM

Reviewed by: William Prestwood BSc Director

Requested by: Base Architects

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1 INTRODUCTION

1.1 BACKGROUND TO DEVELOPMENT

Retrospective planning permission will be sought for the erection of an agricultural storage unit at Chetwynd Grove, Bangor Road, Marchwiel, Wrexham, LL13 0TF (P/2024/1247).

Chetwynd Grove is located between Marchwiel and Cross Lanes in Wrexham. The property comprises a residential dwelling, and several commercial and agricultural structures. There is a car park and yard area in the centre, and the surrounding landscape seems to be agricultural grassland used for grazing and exercising horses.

The application site sits to the south of the existing yard, with an improved grassland field. The site is accessed from the existing yard and the constructed building lies some 5m from the native hedge which forms the west boundary of the wider field. Habitat loss is limited to an area of improved grassland for the provision of a small yard and the building itself.

Arbor Vitae Environment were commissioned by Base Architects to provide an overview of the Green Infrastructure at the site, and evidence of how the proposed plans accord with the 'Step Wise' approached, as set out in Planning Policy Wales 11, Chapter 6.

Planning Policy Wales (edition 11) describes a Green Infrastructure Assessment as "an integrated map-based evidence resource which uses existing datasets and the best available information to map existing green infrastructure and ecological assets" (PPW 11, 6.2.6). Green Infrastructure Assessments will largely be conducted by Local Planning Authorities in Wales, with 'on-the-ground' information provided in the form of Ecological Assessments, accompanying all planning applications (where applicable).

1.2 SCOPE OF ASSESSMENT

The following document aims to set out the existing and proposed green infrastructure associated with the development site. Guidance Note 042 'Green Infrastructure Assessments' has been used as a reference point for providing appropriate information.

The Welsh Information for Nature-based Solutions mapping platform was accessed and several data sets interrogated. Other data sources accessed include Data Map Wales.

The North East Wales Area Statement (https://naturalresources.wales/about-us/what-we-do/strategies-and-plans/area-statements/north-east-wales-area-statement/introduction-to-north-east-wales-area-statement/?lang=en) sets out the priorities or 'themes' which have been developed within the area. The five priorities within this area are:

- Climate emergency: resilience and adaptation,
- Develop and improve urban/rural green infrastructure,
- Increasing woodland cover for social, environmental and economic benefits,
- Promoting the resilience of ecosystems in maintaining and enhancing biodiversity,
- Protecting water and soil through farming and sustainable land management.

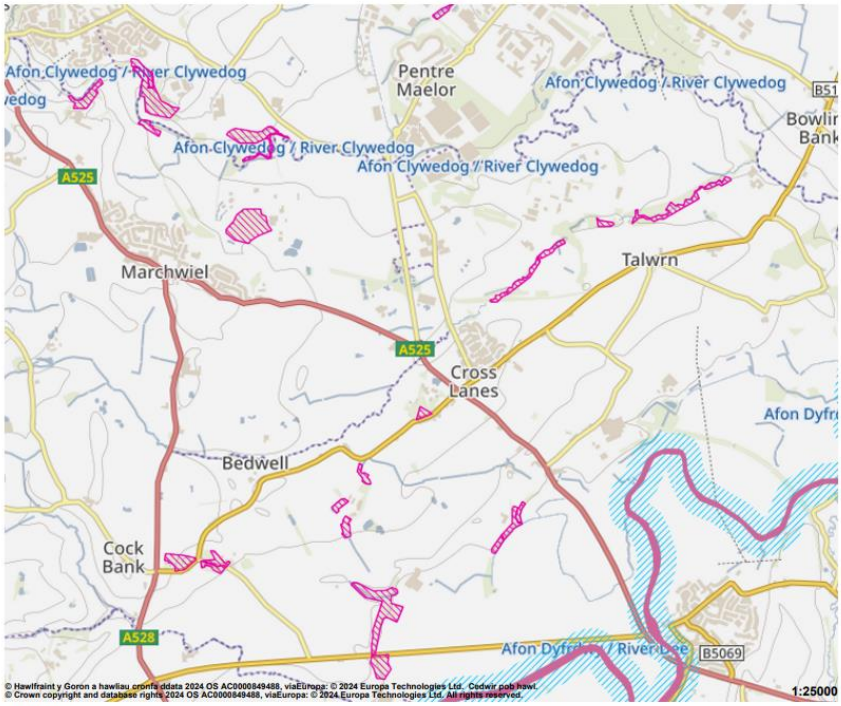
1.3 PERSONNEL

This report has been prepared by Phillipa Stirling BSc MSc ACIEEM: Ecologist.

2 GREEN INFRASTRUCTURE

GREEN INFRASTRUCTURE ASSESSMENT	
BASELINE	Please refer to the following documents which have been included in the planning application: • Design and Access Statement • Existing site plan • Proposed site plan The site lies along the west boundary of an agricultural grassland field to the south of the existing yard at Chetwynd Grove. Land to the north is bound by developed ground and a range of buildings, including a residential property and several traditional and modern farm building. There are no statutorily designated sites located within 1km of the search area. Green infrastructure at the site is currently limited to boundary features including hedgerow, mature trees within the hedgerows, and narrow corridors of tree and shrub planting which forms the north and east boundary of the property, adjacent to the A525. The boundary features form ecological networks which can be used by a range of wildlife, especially birds. These features are mostly in very good condition, having been maintained regularly for a number of years. Sheep grazing has resulted in some of the hedgerows being damaged at the base, but not to the detriment of the health of the hedge.

Chetwynd Grove



Special Protection Areas (SPA)

National Nature Reserves (NNR)

Ramsar Wetlands of international importance

Local Nature Reserves (LNR)

WOM21 Site of Special Scientific Interest (SSSI) / Special Area ...

Site of Special Scientific Interest

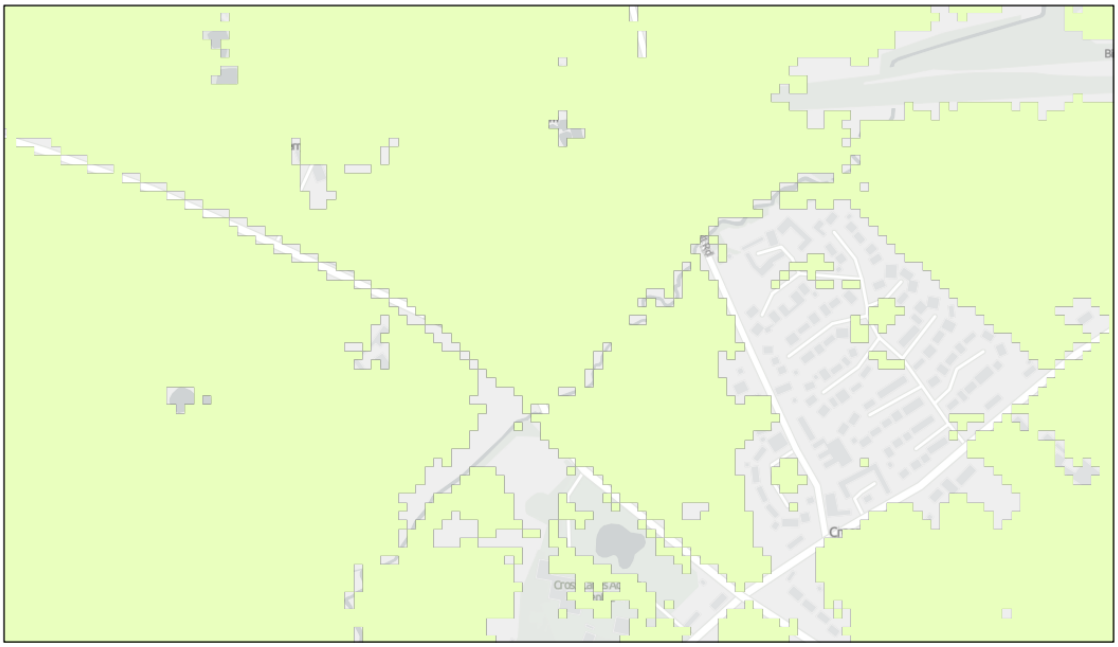
Sites of Special Scientific Interest (SSSI)

WOM21 Ancient Woodland Inventory

Ancient Woodland Inventory 2021

06/12/2024

Chetwynd Grove



06/12/2024, 12:05:39

WINS ONS Broad Habitats Enclosed Farmland

Enclosed farmland

1:4,504

0 0.04 0.07 0.15 mi

0 0.05 0.1 0.2 km

CNC/NRW, Contains OS data © Crown Copyright and database right 2023
Contains data from OS Zoomstack

Cyfoeth Naturiol Cymru Natural Resources Wales
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PRIORITIES	➢ Climate emergency: resilience and adaptation. Drainage for the building will connect into an existing sustainable drainage system at the site. There are no new foul drainage requirements at the site. Planting of long-lived broadleaved trees as part of enhancement measures will provide individual habitat, as well as canopy-level connectivity, and long-term ground level shading. ➢ Develop and improve urban/rural green infrastructure. Plans for the site will include native tree planting, to provide net benefit for biodiversity at the site. This will help the structure blend into the surrounding landscape and all retained trees along the west will be protected throughout the lifetime of the development. ➢ Increasing woodland cover for social, environmental and economic benefits.

	There is limited scope at this site to increase the local woodland cover due to use for agricultural purposes. Planting of long-lived broadleaved native trees will provide some relative value in overall canopy cover. ➢ Promoting the resilience of ecosystems in maintaining and enhancing biodiversity. All features at the site which provide any value to wildlife have been maintained throughout works (hedges and trees). The improved grassland field is of negligible ecological significance and therefore its loss is not expected to have had any impact upon local biodiversity. ➢ Protecting water and soil through farming and sustainable land management. The site does not lie within flood consequence areas and therefore run-off or pollution is not expected to be an issue.
OPPORTUNITY	The proposed habitat creation has been designed to provide as much habitat continuity and linear landscape links, providing additional corridors for wildlife along the east boundary. The retention of all hedgerow features and healthy trees will provide good habitat connectivity in perpetuity. ➢ Individual trees A total of 8 native trees will be planted along the east and south boundary of the new building. There are no doors on these elevations and therefore restricting access will not be an issue. A new boundary fence should be installed along the red line shown, with tree planting inside. This will protect trees from grazing pressure or other livestock related damage. Trees will be planted at 1.2m height and fitted with suitable support and guard. Species to be used are oak, rowan, and field maple.

3 STEP-WISE APPROACH

The Steps	
Avoid	The Design and Access Statement states that 'The outbuilding has been constructed with a 5m easement from the western boundary hedgerow and tree line and all existing trees and foliage remain unaffected by the development'. The trees and hedge along the west boundary are not currently showing any signs of decline as a direct result of the work but it is suggested that a review of the features along the west boundary

	is carried out after 5 years. Any hedge or tree losses as a result of the development will be replaced.
	
Minimise	-
Mitigate/restore	Mitigation for the loss of a relatively small area of improved grassland is not required.
Compensate on site	Ecological enhancement measures for the site will include the planting of 8x native trees along the east and south boundary of the site. The planting will provide an additional linear feature at the site and join to the hedge and tree line at the west boundary.
Compensate off-site	-

4 REFERENCES

Natural Resources Wales (2023) Green Infrastructure Assessments: A guide to key Natural Resources Wales' datasets and how to use them as part of a Green Infrastructure Assessment. GN042.

Welsh Government (2024) Planning Policy Wales. Edition 12.

	
East facing elevation	Relationship with surrounding grassland
	
North facing elevation	South facing elevation