

	Applicant Ecologist statement	LPA Agreement?	LPA Comments
Irreplaceable habitats present?	<p>Are there irreplaceable habitats present on site, which will be impacted by development? (see Planning Policy Wales for current list of irreplaceable habitats)</p> <p>There are no irreplaceable habitats on the site that will be impacted by development.</p> <p>How will these be protected to ensure they are not damaged or lost as a result of the proposals?</p> <p>Not applicable.</p>	Y/N	
Protected or priority species/habitats present?	<p>The presence of a species protected under European or UK legislation, or under Section 7 of the Environment (Wales) Act 2016 is a material consideration.</p> <p>Is the proposed development likely to result in disturbance or harm to the species or its habitat?</p> <p>Protected/priority species at/around site;</p> <p>Badger</p> <ul style="list-style-type: none"> • Habitat use; No setts found on site. Breaches/paths have been recorded on site, and badgers have been recorded on a camera-trap at the site. • Impact due to works; No adverse impacts on Badgers anticipated as there is no anticipated habitat loss. Wetland creation proposals may result in loss of open grassland habitat which is used for foraging, however planting of woodland and scrub to provide habitat and food will provide resources in the medium-term. Best practice measures and RAMS (including covering of trenches and / or the installation of ramps) will be implemented to avoid disturbance or harm. Access points provided to allow continued movement across site. <p>Bats</p> <ul style="list-style-type: none"> • Habitat use; Trees on site support moderate PRFs, hedges and trees provide moderate value commuting/foraging opportunities. • Impact due to works; No trees will be directly impacted as part of the current proposals, and so no direct impacts on tree-roosting bats are anticipated. RAMS are provided (timing, checks by an ecologist) for any works within 10m of trees with moderate or greater roosting potential. No works will occur within the RPA of existing trees and will 	Y/N	

be protected in accordance with BS5837:2012 Trees in Relation to Design, Demolition and Construction - Recommendations.

Potential negative impacts to foraging/ commuting bats from habitat loss (such as minor hedgerow breaches or loss of improved grassland) will be mitigated by on-site replacement planting with no loss of habitat value. Proposals include an increase of woodland and scrub cover to 20%, thereby enhancing foraging resources.

The existing building on site has potential to support roosting bats, and further surveys are planned as the structure is scheduled for demolition. A new wildlife barn will be constructed with features specially designed to support roosting bats, thereby providing compensation should bat roosts be destroyed during demolition. The new structure will be erected prior to the activity season following demolition. Interim bat boxes will be provided on site and in accordance with a Method Statement should a bat licence be required. No site lighting is proposed.

During any habitat construction works, there will be no artificial lighting of the watercourses, hedgerows and ponds, to ensure that lighting does not result in adverse effects on foraging and commuting bats.

Otter

- **Habitat use;** The watercourses on the site are fast-flowing and could be used by otter for commuting. No evidence of otter holts or otter presence at the site has been recorded, but occasional presence cannot be discounted.
- **Impact due to works;** No loss of habitat. Mitigation measures (pollution prevention, management of excavations, material storage) during any habitat creation activities involving construction vehicles near the watercourses will be required. No obstruction to the watercourse will occur.

Brown Hare

- **Habitat use;** Site provides good habitat.
- **Impact due to works;** The creation of wetland habitats within the site may reduce the area of longer-grassland habitat. However, grassland habitats and woodland edges will be retained in places and creation of woodland and scrub will provide some additional resource.

Polecat

	<ul style="list-style-type: none"> • Habitat use; Their presence on site is confirmed. • Impact due to works; Vegetation clearance may result in potential damage to breeding polecats if present on site. Any vegetation clearance of areas which could be used by polecat for breeding (including rabbit burrows) should be avoided between May and June. Creation of woodland habitat will provide additional resources. <p>GCN</p> <ul style="list-style-type: none"> • Habitat use; The habitats on site provide good terrestrial foraging, commuting and hibernation habitat for GCN. The ponds on site ponds are known to support a low number of individual GCN. No evidence of breeding has been recorded to date. • Impact due to works; A method statement accompanying an associated GCN licence application contains details on amphibian fencing, controlled vegetation removal, hand-searches, and movement of any located animals outside of works area. RAMS will be employed for any habitat creation works located further than 250m from a known breeding pond. The habitat improvement and creation measures (in particular the creation of new aquatic habitat) will provide enhanced habitats in the medium-term. <p>Reptiles</p> <ul style="list-style-type: none"> • Priority species; Adder, Common Lizard, Grass snake • Habitat use; The habitats within the Phase 3 land are considered to provide good basking, foraging and hibernation opportunities. • Impact due to works; RAMS for reptiles will be employed during habitat creation works. The habitat creation works will provide enhanced habitats in the medium-term. <p>Bird species</p> <ul style="list-style-type: none"> • Habitat use; Numerous nesting opportunities for many species, including priority species. • Impact due to works; All trees are retained. Minor loss of nesting opportunities associated with wetland creation and minor hedgerow breaching for installing a fence line. Loss of current nesting habitat in existing building scheduled for demolition. This will be compensated for by woodland, scrub and hedgerow planting in excess of loss, with proposals for woodland and scrub cover to reach 20% on site. Additionally, a new wildlife barn will be constructed, with features specially designed to support nesting 		
--	---	--	--

birds. Works which will remove nesting habitat will be done outside of the nesting season or following checks by a qualified ecologist.

White-letter Hairstreak

- **Habitat use;** Habitat supportive of breeding on site.
- **Impact due to works;** Existing habitat maintained, Wych elm (*Ulmus glabra*) to be planted (larval host plant).

Hedgehogs

- **Habitat use;** Wider site for foraging and commuting.
- **Impact due to works;** No significant impact due to works are expected. Integrity of overall site and habitat value will be retained and enhanced due to increased habitat diversity. A watching brief for any habitat clearance likely to support hedgehogs will be employed. Access points across the site will be provided.

Protected statutory sites;

- No statutory protected sites within 1km.

Section 7 habitats;

Boundary and linear features - Hedgerow

- **Habitat value;** Local value.
- **Impact due to works;** Existing hedgerow to be maintained excepting some short hedgerow sections which will be removed to accommodate fencing installation. This will be compensated for with on-site habitat enhancement.

Standing open water - Ponds

- **Habitat value;** Local value.
- **GCN HSI Score; 0.71 (Ponds 1-3), 0.59 (Pond 4), 0.65 (Pond 5), 0.78 (Pond 6)**
- **Impact due to works;** Existing ponds will be retained and enhanced, and new ponds will be added to a total of 11 features. The proposals include wetland creation which may result in changes to the existing ponds, however this will create a more complex mosaic

of habitats within the site, enhancing the overall existing habitat. As ponds are currently ephemeral, this habitat is likely to be enhanced as a result of the project.

Rivers and Streams – Watercourse/Rivers

- **Habitat value;** Local value.
- **Impact due to works;** The proposals include wetland creation which may result in changes to the existing watercourses, however this will create a more complex mosaic of habitats within the site, enhancing the overall existing habitat.

How will you ensure that the range and population of the species is sustained.

Habitat monitoring

- Site will be subject to ecological survey prior to works to ensure that there is no harm to existing features which are important for biodiversity.
- Interventions will be monitored using a variety of standard wildlife and habitat survey methodologies to record changes over time and to help guide future management.
- The site will be supported by a habitat management plan, which will be updated as required to ensure ongoing maintenance is carried out to deliver the greatest benefits.

Habitat creation

A habitat establishment plan will support the creation, development, and management of the new habitats created as part of the proposals. This will include the following features;

- New ponds, native broad-leaved scrub/woodland to reach 20% cover, wetland creation and management, to achieve net benefit for on-site biodiversity.
- Habitats of benefit to range of native wildlife and of greater value than the existing habitat in short- medium term.
- Trees sourced from local provenance stock grown at the County Tree Nursery.
- Trees planted to create a mosaic of woodland habitats to provide a wide variety of ecological niches.
- Ponds left to naturally establish and become colonised by native wetland plant species.

<p>Stepwise Approach Followed?</p>	<p><i>Have you followed the stepwise approach to ensure the proposals do not result in harm to habitats and species?</i></p> <p><i>Which step did you reach in your assessment?</i></p> <p>Avoid: Overall, no hectareage of green infrastructure is being lost. Some removal of certain vegetation (hedgerow, open grassland) required to facilitate habitat value improvement and installation of reserve infrastructure, causing a loss of vegetation on site prior to completion of development.</p> <p>Minimise: The sections of hedgerow to be removed kept minimal, some removal required to facilitate fencing installation.</p> <p>Mitigate: Damage to biodiversity via loss of hedgerow mitigated by replacement planting of planting species-rich hedgerows in excess of loss, providing an increase in species diversity and abundance. Damage to biodiversity via loss of open species-poor grassland mitigated by replacement with higher-value, species-rich habitat including woodland, scrub pasture, wetland and wildflower meadows. Damage to biodiversity via loss of nesting/roosting habitat in the existing building on site mitigated via provision of alternative nesting/roosting site in the form of a purpose-built 'wildlife barn', which will contain features to encourage bat and bird species. Demolition to be completed under protected species licence and under ecological supervision.</p> <p>Conclusion; Following creation of species-rich habitat, initial loss of biodiversity caused by onset of development at the beginning of development will be mitigated in full, in excess of like for like, accounting for disturbance and time lags for the recovery of habitat and species. Compensation is not required due to mitigation ensuring habitat and species value of the site is maintained.</p> <p>+ Enhancement: additional roosting and nesting provision for bird and bat species; increase in number of ponds; creation of woodland and wetland mosaics.</p>	<p>Y/N</p>	
---	---	------------	--

***The following section of the Green Infrastructure Statement relates to the components of Ecosystem Resilience (DECCA). When filling out this section you must consider your proposals in the context of Denbighshire County Council’s Green Infrastructure Assessment and demonstrate how they align with that document.**

<p>Diversity</p>	<p><i>How will the proposed development maintain and enhance biodiversity in and around the site?</i></p> <p>The existing site is currently dominated by species-poor improved grassland. Diversity will be increased by planting of native, species-rich habitats around the site, and maintaining existing species diversity. This will include;</p> <ul style="list-style-type: none"> • A variety of native woody shrubs and trees known to support a greater diversity of wildlife than the existing habitats. • Creation of new wetland areas, and enhancement and restoration of existing features currently in late-stage succession no longer supporting open water or the variety of species previously present. • The wildflower meadow area is already relatively species rich, containing a variety of native perennial wildflowers associated with grassland habitats. This will be maintained. In addition, this habitat will be managed using cut and collect equipment and yellow rattle to reduce the fertility of the soil and control the growth of coarse and dominant grasses, allowing the wildflowers to thrive. New species may be added to the sward using local provenance plug plants grown at the County Tree Nursery. • The majority of hedgerow will be maintained, preserving the current species diversity. In addition, new hedgerows will be created at the site and will contain a mixture of native broadleaf species including hawthorn, field maple, holly, alder, goat willow, blackthorn, hazel, cherry plum (<i>Prunus cerasifera</i>), crab apple, and rowen. 	<p>Y/N</p>	
-------------------------	---	------------	--

Extent	<p><i>How will the proposed development avoid loss in the extent of biodiversity and incorporate measures to appropriately maintain and enlarge existing habitats, especially where extent is small or declining, through habitat restoration and creation with adjoining and nearby areas?</i></p> <p>The existing hectareage of the site is being retained in full as functioning habitat with no loss of species. Habitat infrastructure is being expanded within the site boundaries via woodland and hedgerow planting, and pond creation.</p>	Y/N	
Condition	<p><i>How will the proposed development deliver sufficient scale and functioning natural processes or appropriate management to provide structural complexity and sustain diverse mosaics of habitats?</i></p> <p>The change of use will result in the conversion of grade 3b agriculture land, currently comprised of species poor grassland, to a rich mosaic of native broadleaf woodland, wetland, scrub, wood pasture, and wildflower meadow, thus increasing the condition and structural complexity of the site. Existing ponds will be retained and enhanced, and new ponds created. A new wildlife barn will be constructed, with features specially designed to support a wide variety of wildlife including nesting birds and roosting bats.</p> <p><i>How do the proposals consider direct, indirect and cumulative impacts and benefits, and seeks to reduce pressures?</i></p> <p>Direct impacts: disturbance to species currently utilising the site, loss of small sections of hedgerow. Pressures reduced: Precautionary and Reasonable Avoidance Measures implemented; GCN licence to facilitate works near breeding ponds; bat licence to facilitate demolition works should surveys identify presence of roost(s), re-planting in excess of lost vegetation.</p> <p>Indirect impacts: access points for mammals altered due to fencing. Alteration to foraging activity over open grassland due to planting. Pressures reduced: ensuring appropriate access points in new fencing are provided. Planting will provide valuable food and foraging resources once established.</p>	Y/N	

	<p>Direct benefits: increase in canopy, increase in species diversity through planting and management (and resulting increase in resource availability), increase in nesting and roosting opportunities.</p> <p>Cumulative impact: Increase in species and habitat diversity and abundance.</p>		
<p>Connectivity</p>	<p><i>How will the proposed development identify and incorporate measures which enable appropriate links to be made between the site and its surroundings so as to improve connectivity?</i></p> <p><i>Opportunities include enlarging habitat areas, developing buffers around designated sites or other biodiversity assets or corridors, including transport and river corridors, removal of barriers and the creation of ‘stepping stones’ to strengthen the ability of habitats and ecological networks to adapt.</i></p> <p>A mosaic of native broadleaf woodland, wetland, scrub, wood pasture, and wildflower meadow will be created, thus enlarging and expanding existing habitat and creating valuable new areas of increased structural complexity. Cofnod returned many species of conservation value within 1km; by providing improved and new habitat, the site can provide opportunity for species to expand their current range. For example, new ponds may provide more suitable habitat for breeding GCN due to presence of individuals on site. Barriers to dispersal will be minimised through creation of hedgehog and badger access points, enabling individuals to move throughout the site and from/to neighbouring habitats. New roosting opportunities for the array of bats currently utilising the site for foraging and commuting will be provided.</p> <p>The current proposal will be complimented by an adjacent scheme under the same management to transform a further section of the site into a nature reserve. This will result in increased connectivity, encompassing a wider area and providing greater opportunity for species expansion and establishment.</p>	<p>Y/N</p>	
<p>Adaptability</p>	<p><i>Resistance and recovery from pressures occur when the attributes of ecosystem resilience – diversity, extent, condition and connectivity of ecosystems are in good condition. Habitats and</i></p>	<p>Y/N</p>	

	<p><i>species are not static: planning for nature recovery should aim to sustain habitats and associated species as the geography and landuse changes around them, harnessing natural processes and opportunities for nature-based solutions.</i></p> <p><i>Have all impacts to the ecosystem resilience attributes of biodiversity, using the pressures identified in SoNaRR, been identified?</i></p> <p>Diversity: due to extensive planting and management, diversity of plant species will be increased. Provision of improved habitat diversity will encourage use by species known to occur in the area, thus improving the diversity and abundance of species at the site.</p> <p>Extent: the total hectarage of the existing site will be maintained in full, and the structural complexity improved. The proposal will result in the considerable increase in extent of valuable habitats relative to the current improved grassland habitat, effectively creating a new 30acre nature reserve.</p> <p>Condition: by working through the step-wise approach, any activities which may reduce the current condition of biodiversity at the site have been addressed, first by avoiding any negative impacts, and then by minimising, and mitigating where required (such as removal of sections of hedgerow, and loss of open grassland). In addition, enhancement has been provided and long-term management will be provided, thus increasing the overall condition of the ecosystems at the site.</p> <p>Connectivity: by increasing the expanse of native vegetation, existing habitat is improved, and new habitat is being provided. Access for mammals and birds is being retained and supporting habitat is being increased. No barriers are proposed to prevent movement into the site by priority and protected species. Nearby sites, including statutory and non-statutory (for example, Glascoed Nature Reserve) will increase the connectivity between this and other sites of ecological value.</p> <p><i>Have measures been incorporated to ensure that biodiversity's ability to adapt to, resist and recover from pressures is enhanced? Enhancement of resilient ecological networks and securing and enhancing green infrastructure will be key ways of achieving this.</i></p>		
--	--	--	--

	<p>Various species of Elms are the larval host-plant for White-letter hairstreak butterfly. The ecological report concludes that use of a disease-resistant elm cultivar within the tree/ shrub and hedgerow planting would be an appropriate means of increasing resistance to disease pressures.</p> <p>Overall maintenance and increase in species diversity due to sensitive planting at the site will increase resilience to local pressures. A reactive management plan will ensure that the site can adapt to future conditions, along with ongoing monitoring to inform the management plan.</p>		
<p>Long term management</p>	<p><i>What mechanism will be used to secure the long-term management of retained habitats?</i></p> <p><i>The management plan should set out the immediate and on-going management of the site, future monitoring arrangements for all secured measures and it should clearly identify the funding mechanisms in place to meet the management plan objectives. The management plan must set out how a net benefit for biodiversity will be achieved within as short a time as possible and be locally responsive and relevant to local circumstances.</i></p> <p>A Habitat Creation and Management Plan will be provided at a later stage in the application. It will include details of monitoring using a variety of standard wildlife and habitat survey methodologies to record changes over time and to help guide future management, and the plan will be updated as required to ensure ongoing maintenance is carried out to deliver the greatest benefits for biodiversity.</p> <p>Funding for the reserve is secured through Local Places for Nature Grant Funding from Welsh Government, and Denbighshire County Council's Climate and Ecological Emergency Budget. Once complete, the site will fall within Denbighshire County Council's Countryside Services Portfolio and will be managed with existing budgets and resources.</p>		
<p>Summary statement of how the proposed development will deliver a net benefit for biodiversity.</p>			

Following the stepwise approach, how will you ensure that the proposed development results in a net benefit for biodiversity?

Enhancement measures could include on-site, locally relevant, habitat creation and/or could be part of the development itself favouring the use of native species using biodiverse nature-based solutions such as SUDS, green roofs, grassland management for wildflowers or reptile refugia, woodland expansion, and wetland creation.

Following the step-wise approach, on-site biodiversity is being maintained through firstly avoidance (no hectarage of green infrastructure is being lost), minimising existing habitat removal, and finally through mitigation in the form of sensitive planting to maintain native species diversity.

In parallel to mitigation measures, enhancement is required to result in a net benefit for biodiversity. This is being secured via habitat creation to increase of species diversity, including creation of broadleaf woodland, wetland, scrub, wood pasture, ponds, wildflower meadow, and a wildlife barn supporting features capable of providing bird and bat roosting features. Natural water drainage may also be enhanced via increase in habitat complexity and diversity.

LPA Ecologist Statement

Signed:

Date: