# Darland Academy

784-B068276

# Net Benefit for Biodiversity Report

**Wrexham AFC**

**December 2024**

**Document prepared on behalf of Tetra Tech Limited. Registered in England number: 01959704**

TETRA TECH

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# 1.0 INTRODUCTION

Tetra Tech Limited (Tetra Tech) was commissioned by Wrexham AFC Ltd. on 6th December 2024 to prepare a Net Benefit for Biodiversity (NBB) report to support a retrospective planning application submitted to Wrexham County Borough Council (P/2024/1293). The NBB is required to discharge Condition 3 within the Report of the Chief Officer Economy and Planning document which states:

*"No further works shall take place until measures to deliver net benefit for biodiversity (NBB) have been submitted to and approved by the Local Planning Authority. The measures as approved shall be implemented within an agreed timescale and shall be maintained thereafter for the lifetime of the development."*

This report has been prepared by Tetra Tech's Consultant Ecologist Bronwyn Dennis, BSc (Hons) and the conditions pertinent to it are provided in Appendix A.

## 1.1 BACKGROUND

The site is located within and adjacent to Darland High School, Chester Road, Rosset, Wrexham, Wales. It comprised of hard standing, modified amenity grassland and developed areas associated with Darland High School. The surrounding landscape comprises residential housing to the north and west, and agricultural fields with associated farm buildings to the south and east.

The proposed development includes the erection of new training facilities at Darland School. These will function as Wrexham AFC's academy for children aged under 9 to under 18 and comprises of the following:

- Building 1 (constructed) - located closest to the school and is situated on land north of the scout hut on the existing playground. It is 30m x 13m with a low-pitched roof with a maximum height of 3.50m. This building will provide changing rooms, a small ancillary office and a plant / store.
- Building 2 (constructed) - located further south on the eastern side of the existing scout building. It is 27m x 11.8m with a flat roof of 3.20m. The building will provide staff changing rooms, meeting rooms, a medical room, medical office, gym, a classroom and ancillary office space.
- One shipping container (in situ) - located within the playing fields off Gamford Lane and is used by the ground's person for storage in conjunction with the maintenance of the football pitches.

Prior to this report, associated surveys and reports undertaken on the site included:

- Preliminary Ecological Appraisal (Retrospective) (Tetra Tech, 2024a)
- Wrexham GCN RAMs (Tetra Tech, 2024b)
- Wrexham INNS RAMs (Tetra Tech, 2024c)

These reports should also be read in conjunction with this companion document to provide further baseline detail and site context.

## 1.2 PURPOSE OF THE REPORT

The NBB report is a key document for demonstrating consideration of biodiversity during the planning process. This report will:

- highlight habitat and species baseline data;
- demonstrate how the 'stepwise approach' has been applied in maintaining and enhancing biodiversity; and
- provide a sufficiently detailed ecological management and maintenance plan to secure prescribed interventions.

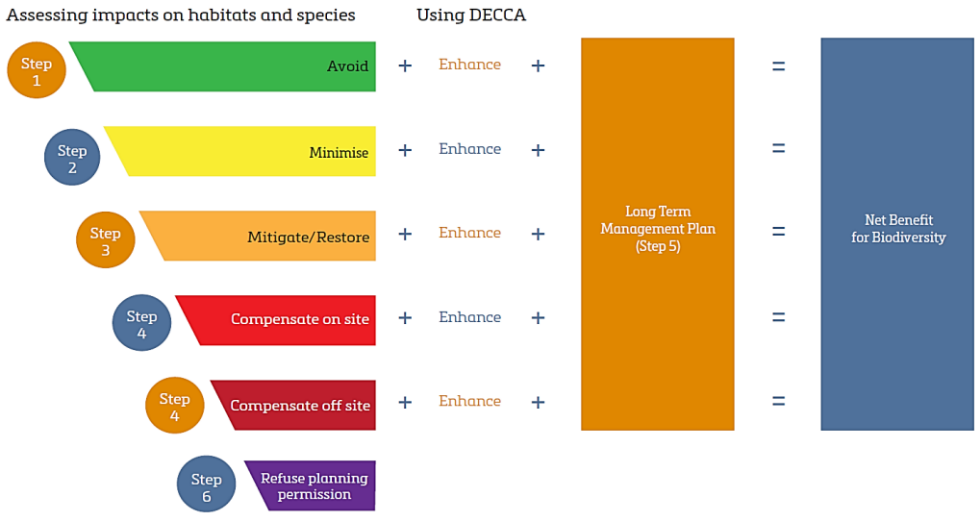
Further information on relevant species / environmental legislation can be found in Appendix B.

## 1.3 NATIONAL PLANNING POLICY

The national planning policy guidance is found principally in Planning Policy Wales Edition 12 (PPW) dated February 2024 (Welsh Government, 2024). A short summary of the main points directly relevant to the ecological assessment of the development is provided below.

Paragraph 6.4.5 states that the planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions, and that the development should leave biodiversity and the resilience of ecosystems in a significantly better state than before. This should be achieved through securing immediate and long-term, measurable and demonstrable benefit, primarily on or immediately adjacent to the site.

PPW also sets out a step-wise approach (Drawing 1) which is the means of demonstrating the steps which have been taken towards securing a net benefit for biodiversity. Paragraph 6.4.21 states 'Planning authorities must follow a stepwise approach to maintain and enhance biodiversity and build resilient ecological networks by ensuring that any adverse environmental effects are firstly avoided, then minimized, mitigated, and as a last resort compensated for; enhancement must be secured wherever possible'.




Drawing 1: a summary of the stepwise approach as found in Figure 12 of PPW (Welsh Government, 2024)

Full details of legislation, National Planning Policy Framework (NPPF) and additional policy relevant to the ecology and development of the site are provided in Appendix B.

## 1.4 FUTURE WALES: THE NATIONAL PLAN 2040

Future Wales sets out the planning policies for Wales and how these should be applied. It embeds the principles of the Well-being of Future Generations (Wales) Act 2015. Of relevance to this document is the **Natural Resources Policy,** which identifies the key priorities, risks and opportunities to achieve the sustainable management of natural resources. This includes the safeguarding of areas for the purposes of improving the resilience of ecological networks and ecosystem services, identifying areas for the provision of green infrastructure and to secure biodiversity enhancement (net benefit).

## 1.5 WREXHAM BIODIVERSITY ACTION PLAN

The Wrexham Local Biodiversity Action Plan (LBAP) was adopted in 2011. Local planning guidance note 32 pertains to biodiversity and development. A short summary of the main policies directly relevant to the ecological assessment of the development is provided below:

- Policy PS2 states that development must not materially detrimentally affect countryside, landscape / townscape character, open space, or the quality of the natural environment.
- Policy PS11 states that encouragement will be given to proposals which improve the biodiversity value of sites and to the establishment of local nature reserves where the nature conservation and landscape interest of the land will be protected and enhanced.
- Policy EC6 states that development within or close to sites of biodiversity interest will only be permitted where the need for development outweighs the need to safeguard the intrinsic nature of conservation value of the site. Where such development is permitted, damage should be kept to a minimum and compensation should be provided. Measures to improve the biodiversity value of sites and enhance their natural conservation interest will be supported.

Full details of Wrexham LBAP policies relating to biodiversity and development are provided in Appendix B.

# 2.0 ROLES AND RESPONSIBILITIES

## 2.1 WREXHAM AFC LTD.

The land manager/ owner responsibilities include the following:

- To adhere to the relevant provisions made within this document for the lifetime of the development.
- To ensure / secure ongoing funding is available to be able to adhere to the relevant provisions made within this document for the lifetime of the development.
- Overseeing that the created habitats on site are managed as per the management plan for the lifetime of the development.
- To appoint a suitability qualified ecologist to monitor the condition of habitats and report on success / failure of establishment, including making recommendations for any remedial action.
- Keep record of habitat monitoring for the lifetime of the development.
- Ensuring that remedial action is taken where necessary for the lifetime of the development.
- Contact a suitably qualified ecologist when further information if required.

## 2.2 BIODIVERSITY CHAMPION

A Biodiversity Champion (BC) will be nominated to influence site activities during the construction and operational phases in line with the recommendations of this report. The BC does not need to be an ecologist but will be familiar with this report as well as the site and have sufficient authority and presence on site to influence activities. Usually, a member of the lead contractor team takes this role during the site Construction Phase. The Biodiversity Champion nominated during the Construction Phase may not have regular site presence; therefore, the role of BC can be transferred to a new individual (such as the management agent or land agent) once management of the site is transferred into the Operational Phase.

During the Operational Phase the role of a BC is to provide advice to the site workers on all pertinent ecological issues as highlighted by this document as well as preceding documents and to check that the ecological protection and mitigation measures, as specified in this document, are correctly implemented.

General responsibilities of the Biodiversity Champion during the Construction Phase are:

- Overseeing that all site contractors/ workers know to report any ecological concerns / issues to the BC;
- Check and document that an overview of the site's ecological constraints is included within the contractor/worker inductions as appropriate;
- Undertaking weekly checks of the retained habitats;
- Supervising and monitoring the implementation and habitat creation measures as set out in this document; and
- Contacting an ecologist with uncertainties about ecological issues surrounding the project proposals.

General responsibilities of the Biodiversity Champion during the Operational Phase are:

- Overseeing that the created habitats on site are managed as per the management plan;
- Overseeing mowing as per the requirements in this document; and
- Checking the success of new habitats and ensuring that remedial action is taken where necessary.

Where additional issues are identified, or where it is considered that revised maintenance regimes are needed, the Biodiversity Champion must contact a suitably qualified ecologist who can make changes to management prescriptions as appropriate. The Biodiversity Champion will take photographs, make logbook entries of inspections and produce progress reports as appropriate to evidence that the above responsibilities are being upheld. This monitoring and review process will be carried out as an integral part of the overall management plan.

## 2.3 CONTRACTOR RESPONSIBILITY

The works on the site have now finished.

However, should any additional contractor works be undertaken on site as part of the development, contractor responsibilities will include the following:

- To adhere to the relevant provisions made within this document; and
- To contact the Biodiversity Champion, and/or if necessary, a suitably qualified ecologist, regarding any uncertainties or activities that may impact on ecological features on site.

This NBB will also be distributed to all relevant personnel involved.

# 3.0 ECOLOGICAL RECEPTORS AND ENHANCEMENT

## 3.1 HABITATS

The development will result in a total loss of 740m$^2$ of onsite habitat (Block 1 equates to 390m$^2$, Block 2 equates to 318.6m$^2$ and the grounds person building equates to 15m$^2$). Of this, approximately 30m$^2$ comprises modified or other neutral grassland. The remaining site components comprise of developed land; sealed surface and artificial unvegetated unsealed surface. These are documented in Figure 2 of the Preliminary Ecological Appraisal (Retrospective) (Tetra Tech, 2024a) report.

Following from the retrospective assessment of the site (Tetra Tech, 2024a) it is considered that no further habitat loss has occurred as a result of the ongoing development (Tetra Tech, 2024a).

The hedgerows, ditch and scattered trees identified on site are due to be retained as part of the development.

To **mitigate** for the loss of modified and other neutral grassland, a total area of 50m$^2$ will be seeded with a native wildflower seed mix adjacent to the areas of retained hedgerow and verges surrounding Block 2 (Figure 1). The planting should be no more than 2m from the base of the hedgerow. Given the increased shade the chosen seed mix should contain species suitable to these conditions for example, the "Hedgerows, Margins & Shaded Areas BW9a 100%" seed mix (Bright Seeds Limited, 2023).

## 3.2 BADGER

It is considered likely that foraging and commuting badgers *Meles meles* may use the site transiently. To **enhance** the site for badger, additional planting of native hedgerow species should be implemented along existing boundary features adjacent to Block 2 (Figure 1).

A 20m length of native, species-rich hedgerow is planted along the fence line. The shrub mix should contain berry producing species, such as rowan *Sorbus acuparia* and elder *Sambucus* nigra. This will provide additional connectivity for commuting badger and enhance foraging resources.

Planting

To establish new hedgerows, plant in two staggered rows spaced 30 cm apart, with a density of four to six plants per metre. Minor species can be grouped singly or randomly within larger blocks of shrubs such as hawthorn *Crataegus monogyna*. Use notch planting for bare-rooted stock, inserting a supporting cane approximately 25cm into the ground next to each plant, and secure both the plant and cane with a clear spiral guard.

The 'Hedgerow Planting Guide' provides recommendations regarding preparation, species choice and maintenance (British Hardwood Tree Nursery, 2024).

## 3.3 BATS

It is considered likely that foraging and commuting bats are present within the site. To **mitigate** for any impacts to foraging and commuting bats, retained boundary habitats (hedgerows and trees) and newly established habitats (new hedgerow planting and wildflower seeded areas) should be protected from

disturbance through implementation of a wildlife-friendly lighting scheme throughout the remainder of the construction phase, and during the operational phases of the development.

The new hedgerow planting will **enhance** the site for commuting bats by creating a vegetated linear corridor. The wildflower planting will also **enhance** the site's abundance of invertebrates, thus increasing foraging resources.

To **enhance** the site for roosting bats, a total of four bat boxes should be placed on retained trees. The boxes should be sited 3-4m high, be placed to avoid direct illumination, placed out of the way of strong winds and positioned south-east to south-west where they can get sun for part of the day. Once installed, any disturbance including maintenance of a bat box must be done under supervision of a licenced ecologist. An example of a suitable bat box which supports smaller bat species and can be installed on trees is the 2F Schwegler Bat Box (NHBS, 2024). The 2F Schwegler Bat Box with Double Front Panel model also provides additional "cavity wall" which is favoured by crevice dwelling species including Nathusius' pipistrelle *Pipistrellus nathusii*, Daubenton's bat *Myotis daubetonii* and the common pipistrelle *Pipistrellus pipistrellus*.Further specifications are included within Table 1 Bat Box Specifications

Table 1 Bat Box Specifications

| Type | Description | Specifications |
|---|---|---|
| The Schwegler 2F with Double Front Panel<br><br>4x required | The Schwegler 2F Double Front Panel includes a baffle which acts as a "cavity wall" and is favoured by crevice dwelling species, manufactured from woodcrete with a lifespan of 20 – 25 yrs. | Width: 16cm;<br>Height: 33cm;<br>Weight: 4.1kg<br><br> |

## 3.4 BIRDS

To **enhance** the site for nesting birds, a provision of eight bird boxes should be implemented on retained trees. The boxes should be placed at least 2m above the ground.

An example of a suitable bird box is the 1B Schwegler Nest Box (NHBS, 2024). This box comes with a variety of entry holes which favour different species including 32mm, 26mm and an oval shaped entry hole (Table

2 Bird Box Specifications. To increase the diversity of birds using the boxes, a mixture of entrance hole sizes will be used.

Table 2 Bird Box Specifications

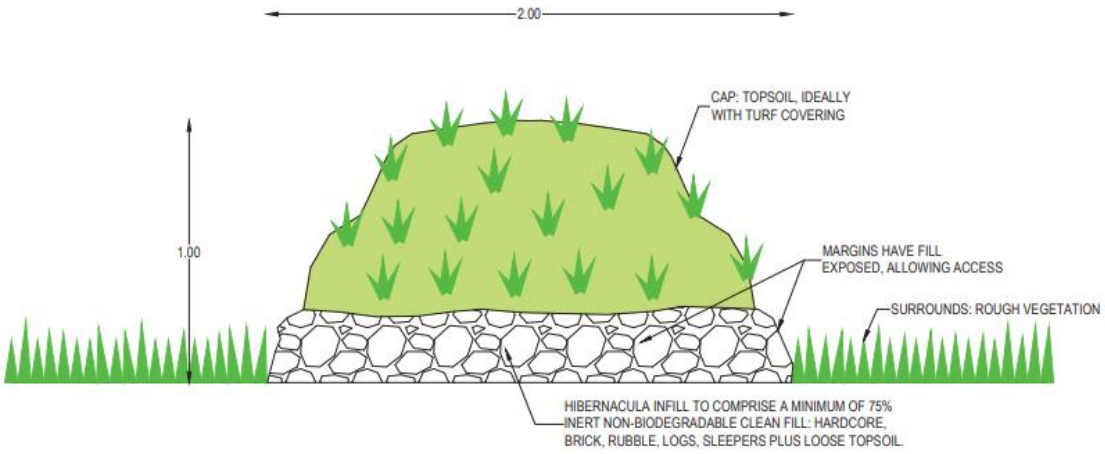
| Type | Description | Specifications |
|---|---|---|
| General purpose bird boxes (Schwegler 1B)<br><br>8x required | The nesting boxes should be attractive to smaller birds such as tits, wrens, and tree sparrows. | Width: 16cm;<br>Height: 23cm;<br>Weight: 3.6kg<br> |

## 3.5 GCN, COMMON AMPHIBIANS AND REPTILES

The site is located in Wrexham, which supports nationally important great crested newt *Triturus cristatus* (GCN) populations. To **enhance** the suitability of the site for terrestrial GCN, common amphibians and reptiles, two hibernacula should be implemented within retained scrub adjacent to the ditch (indicative locations shown on Figure 1). The hibernacula will provide additional areas of refuge and shelter and increase the suitability of the site for hibernation.

The design of the hibernacula will follow that set out in the *Great Crested Newt Mitigation Guidelines* (English Nature 2001) and is illustrated in Drawing 2 below. The hiberncula will be constructed to include brick rubble, logs and loose topsoil, with a covering of turf. The standard hibernacula will each be c. 2m in diameter, 4m in length and c. 1m in height.

The hibernacula should be constructed by a suitable habitat management contractor. It would be preferable if the contractor has previously constructed hibernacula for ecological mitigation or conservation.




Drawing 2 Initiative hibernacula plan (created by Tetra Tech, 2024)

The additional hedgerow planting will also **enhance** commuting and dispersal corridors for GCN, common amphibians and reptiles.

## 3.6 INVERTEBRATES

To **enhance** the site for invertebrates, wildflower planting to be implemented on site should include seed of specific food plants for priority invertebrate species within Wrexham (e.g. agrimony *Agrimonia eupatoria* for grizzled skipper *Pyrgus malvae*).

The naturally wet areas identified within the site will also be maintained and preserved for invertebrates. This will involve keeping the area clear of stockpiled equipment and materials and removal of any invasive or undesirable species as required.

A total of three bug hotels will also be implemented within retained hedgerows and scrub. These will be located less than 2m from the ground. The combination of wildflower planting and bug hotels will provide pollination, sheltering and nesting opportunities for a wide range of invertebrate species.

An example of a suitable bug hotel with a large variety of habitat types is the National Trust Apex Insect House (NHBS, 2024) and is included within Table 3.

Table 3 Invertebrate “Bug Hotel” Specifications

| Type | Description | Specifications |
|---|---|---|
| National Trust Apex Insect House<br><br>3x required | The National Trust Apex Insect House is an ideal addition to any wildlife friendly garden. With a variety of shelter types, it offers a perfect habitat for important invertebrates such as lacewings, ladybirds, some butterflies and solitary bees. | Width: 26cm;<br>Height: 28cm;<br> |

## 3.7 HEDGEHOG

To **mitigate** for any impacts to commuting hedgehog *Erinaceus europaeus*, any fences implemented as part of the development will have an accessible gap at the base to allow for safe passage through. This will help to prevent habitat fragmentation by maintaining commuting pathways.

To **enhance** the site for hedgehog, the implementation of three hedgehog houses will be implemented within retained hedgerows and scrub. This will provide additional habitat for sheltering, nesting and hibernation.

A suitable hedgehog house which is designed to support both nesting and shelter is the HH7 Hogilo Hedgehog / Mammal House (NHBS, 2024). The hedgehog houses will be placed in a sheltered and covered area. It is encouraged to pile leaves and short grass around and within the house.

Brash piles are also valuable structures for hedgehogs and can be placed adjacent to hedgehog houses to increase suitability. Brash piles are to be constructed using logs on the base, with a criss-crossed pile of fallen or cut branches. The structure will  be 0.5min height. Brash piles will also support reptiles, amphibians, other small mammals and invertebrates but will need to be placed sensitively so as not to attract unwanted attention.
Further details of specifications for hedgehog are included within Table 4 Hedgehog Enhancement Specifications.

Table 4 Hedgehog Enhancement Specifications

| Type | Description | Specifications |
|---|---|---|
| HH7 Hogilo Hedgehog/ Mammal House | The HH7 "Hogilo" hedgehog habitat is a purpose-built nesting | Width: 4.5cm;<br>Height: 2.5cm; |

| | | |
|---|---|---|
| 3x required | box and shelter for hedgehogs. | Weight: 3.4kg<br> |

# 4.0 OPERATIONAL MANAGEMENT PLAN

## 4.1 GRASSLAND MANAGEMENT

Relaxing typical intensive management regimes (e.g. mowing) for grassland can benefit wildlife and allow colonisation by native species without necessarily detracting from existing public amenity value. The seeded wildflower grassland will be subject to an annual autumn hay cut to maintain glade and remove scrub. This will ensure that the seed has dropped from the plants present. The mowers / cutting method will be undertaken so that a sward height of 20cm is retained as ground cover. This will prevent ground scalping, which can encourage the invasion of weeds, and will also retain good cover for GCN, common amphibians, reptiles and mammals using the site, maximising the foraging availability as well as ground cover opportunities. Cutting must take place during daylight hours (to reduce the chance that nocturnal species including GCN are present) and the operative be vigilant in case protected species are present foraging within the sward.

The timing of cutting is crucial and will be left until after the grasses and other plants have flowered and seeded (usually late June to late August inclusive). A late summer / early autumn mow (with the clippings removed) will help keep scrub and dominant grasses from proliferating.

Providing that the continuity of mowing is maintained over the years, then wildflowers will be able to flower and set seed between cuts. If this mowing regime is varied to include two cuts a year (maximum), it must be ensured that plants are able to self seed to prevent wildflowers being be lost.

Additionally the grasslands will not be fertilised as this will encourage the domination of the sward by a few highly competitive species. The sward must be at its longest in the summer and shortest in the spring and autumn when most grassland species germinate.

Grass clippings will be collected after cutting and not allowed to degrade on the lawn surface; this maintains nutrient levels at a low level and encourages species diversity.

## 4.2 HEDGEROW

Planted trees and shrubs must be protected from rabbits, livestock and deer either by perimeter fencing or with appropriate tree guards or spiral shelters, where possible.

Planted hedgerow species will be checked annually for establishment and any scrub which fails to establish must be replanted (“gapping-up”). Continue this for five years.

Once established, any planted or regenerated scrub will need to be managed to avoid encroachment into the surrounding habitat and succession into a woodland habitat. Due to the size of the site, management could be completed by flailing:

- Once established (years 2-3 after planting) hedgerow trimming will be undertaken to a height of 5-10cm.
- No one species should dominate, therefore any smothering species e.g. cleavers *Galium aparine*, nettles *Urtica dioica*, bracken *Pteridium aquilinum* or climbing grasses like creeping bent *Agrostis*

*stolonifera* may need to be selectively cleared. This will be completed by hand puling or using garden shears to prevent damage to the hedgerow planting.

- Do not cut shrubs with berries until late winter as berries may form foraging resource for birds and mammals.
- New planting will be monitored for the presence of invasive species which can spread very rapidly once established, and remedial action taken by an invasive species contractor. This will be done both through the ecological monitoring and through annual checks (April-September, ideally in April to allow remedial action to be taken the same year) for Himalayan balsam by the Biodiversity Champion.

## 4.3 BAT AND BIRD BOXES

Bat and bird boxes will be checked annually for signs of damage and/ or vandalism. Once a bat box has been installed, any disturbance including maintenance of a bat box must be done under supervision of a licenced ecologist. Therefore, observations regarding integrity of the boxes will be undertaken from ground level, and a suitably licenced ecologist contacted should any maintenance be required.

The bat and bird boxes recommended in sections 3.3 and 3.4 are both constructed of woodcrete and should last for at least 20-25 years. The bat and bird boxes will remain for the lifetime of the development and replaced as required.

## 4.4 HIBERNACULA

The hibernacula will not require maintenance once constructed but will be inspected once annually during the first five years to check that the overlying turf is establishing and check for damage. If required, the management team will be contacted to undertake remedial action. A GCN licenced ecologist will need to be present during remedial works given the protected status of this species.

## 4.5 BUG HOTELS/ HEDGEHOG HOUSES

The bug hotels and hedgehog houses will not require maintenance once in situ. These will be inspected once annually for damage or vandalism and replaced as necessary.

## 5.0 PROGRAMME

Table 5 sets out the ecological receptor, timing, actions and monitoring during the construction and operational phases.

Table 5: Ecological Receptor and Habitat Management Timetable

| Ecological Receptor | Details | Year/s | Timing |
|---|---|---|---|
| Grassland Management | Wildflower planting | Year 1 of management | Autumn or Spring. |
| | Mowing | Annually | Autumn |
| Badger | Hedgerow planting | Year 1 of management | Winter |
| | Hedgerow trimming | Years 2-3 after establishment | Autumn |
| | "Gapping-up" and controlling smothering plants | When required | Autumn and Winter |
| | Monitoring for invasive species | Annually | April-September (ideally April to allow for any invasive species removal to be undertaken in the same year) |
| Bats | Bat box installation | Upon completion of the development | All year round |
| Birds | Creation of three hibernacula | Upon completion of the development | All year round |
| GCN, common amphibians and reptiles | Creation of two hibernacula | Upon completion of the development | To be constructed upon completion of development |
| Invertebrates | Bug hotel installation | Upon completion of the development | All year round |
| | Preservation of naturally wet areas | Annually | As required. |
| Hedgehog | Hedgehog house installation | Upon completion of the development | All year round |

| Ecological Receptor | Details | Year/s | Timing |
|---|---|---|---|
| | Brash pile creation | Upon completion of the development | All year round |

# 6.0 REFERENCES

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# FIGURES

## Figure 1 – Biodiversity Enhancements Plan

# Biodiversity Enhancement Plan

**Darland Academy**

**Wrexham AFC Limited**

## Legend

- Site Buildings

**Indicative Enhancement Locations**

- Invertebrate Area
- Native Hedgerow Planting
- Relaxed Verge Management
- Wildflower Planting
- Bat Box
- Bird Box
- Bug Hotel
- Hedgehog House/Brash Pile
- Hibernaculum

Block 1

Block 2

Groundsperson Building 1

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Notes: All Wildlife Enhancement Locations are Indicative

Drawn by: AARON.HOWARD

Checked by: Bronwyn Dennis

Figure No. 1

Revision No. A

13 December 2024

0 20 40 60 80 Meters

Scale 1:1,300 @A3

British National Grid

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# APPENDICES

## Appendix A – Report Conditions

## Appendix B – Legislation and Policy

# APPENDIX A: REPORT CONDITIONS

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The report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections'. Environmental conditions can vary and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times. No investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather-related conditions. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions. The “shelf life” of the Report will be determined by a number of factors including; its original purpose, the Client’s instructions, passage of time, advances in technology and techniques, changes in legislation etc. and therefore may require future re-assessment.

The whole of the report must be read as other sections of the report may contain information which puts into context the findings in any executive summary.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. Tetra Tech accept no liability for issues with performance arising from such factors.

# APPENDIX B: LEGISLATION & POLICY

## Habitats Directive

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, or the 'Habitats Directive', is a European Union directive adopted in 1992 in response to the Bern Convention. Its aims are to protect approximately 220 habitats and 1,000 species listed in its several Annexes.

In the UK, the Habitats Directive is transposed into national law via the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales, and via the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland.

## Birds Directive

The EC Directive on the Conservation of Wild Birds (791409/EEC) or 'Birds Directive' was introduced to achieve favourable conservation status of all wild bird species across their distribution range. In this context, the most important provision is the identification and classification of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex 1 of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance.

## Conservation of Habitats and Species Regulations 2017 (as amended)

The 2018 amendments mainly related to the impact of the *People Over Wind* decision and some implications arising for neighbourhood plan development and a range of other planning tools including Local Development Orders and Permission in Principle – see here for full details:

https://www.legislation.gov.uk/uksi/2018/1307/note/made

The 2019 amendments related to the EU exit. Most of these changes involved transferring functions from the European Commission to the appropriate authorities in England and Wales. All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant. The obligations of a competent authority in the 2017 Regulations for the protection of sites or species do not change.– see here for full details:

https://www.legislation.gov.uk/ukdsi/2019/9780111176573

The Regulations make it an offence to deliberately capture, kill, disturb or trade in great crested newt.

## Wildlife & Countryside Act 1981 (as amended)

This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the 'Bern Convention' and the Birds Directive are implemented in the UK. Since it was first introduced, the Act has been amended several times.
The Act makes it an offence to (with exception to species listed in Schedule 2) intentionally:

- kill, injure, or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use; or
- take or destroy an egg of any wild bird.

Or to intentionally do the following to a wild bird listed in Schedule 1:

- disturbs any wild bird while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird.

In addition, the Act makes it an offence (subject to exceptions) to:

- intentionally or recklessly kill, injure or take any wild animal listed on Schedule 5;
- interfere with places used for shelter or protection, or intentionally disturbing animals occupying such places; and
- The Act also prohibits certain methods of killing, injuring, or taking wild animals.

Finally, the Act also makes it an offence (subject to exceptions) to: intentionally pick, uproot or destroy any wild plant listed in Schedule 8, or any seed or spore attached to any such wild plant; unless an authorised person, intentionally uproot any wild plant not included in Schedule 8; or sell, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.
Following all amendments to the Act, Schedule 5 'Animals which are Protected' contains a total of 154 species of animal, including several mammals, reptiles, amphibians, fish and invertebrates. Schedule 8 'Plants which are Protected' of the Act, contains 185 species, including higher plants, bryophytes and fungi and lichens. A comprehensive and up-to-date list of these species can be obtained from the JNCC website.
Part 14 of the Act makes unlawful to plant or otherwise cause to grow in the wild any plant which is listed in Part II of Schedule 9.
It is recommended that plant material of these species is disposed of as bio-hazardous waste, and these plants should not be used in planting schemes.

## Environment (Wales) Act

As part of the Welsh Government's commitment to reversing the decline in biodiversity in Wales and increasing the resilience of its ecosystems, the Environment (Wales) Act 2016 aims to build greater resilience into our ecosystems. Biodiversity and well-functioning ecosystems provide natural solutions that build resilience, which in turn help society create jobs, support livelihoods and human well-being, adapt to the adverse impacts of climate change and contribute to sustainable development.

Part 1 of the Environment Act sets out Wales' approach to planning and managing natural resources at a national and local level with a general purpose linked to statutory 'principles of sustainable management of natural resources' defined within the Act.

Section 6 under Part 1 of the Act places an enhanced duty on public authorities to 'seek to maintain and enhance biodiversity' so far as it is consistent with the proper exercise of those functions. In so doing, public authorities must also seek to 'promote the resilience of ecosystems'. This duty replaces the section 40 duty in the Natural Environment and Rural Communities Act 2006 (NERC Act 2006), in relation to Wales, and applies to those authorities that fell within the previous duty.

Section 7 replaces the duty in section 42 of the NERC Act 2006. The Welsh Ministers will publish, review and revise lists of living organisms and types of habitat in Wales, which they consider are of key significance to sustain and improve biodiversity in relation to Wales. The Welsh Ministers must also take all reasonable steps to maintain and enhance the living organisms and types of habitat included in any list published under this section, and encourage others to take such steps. Certain public authorities will also be required to consider the section 7 list, in complying with the new biodiversity duty under section 6 of the Act. The list is important in assisting public bodies to identify potential issues that they may wish to address in meeting their well-being objectives, in addition to contributing to the well-being goal 'a resilient Wales' (Goal 2). The current Section 7 lists are interim lists which are exactly the same as the previous list under Section 42 of the NERC Act, and is under review in consultation with NRW.

Part 1 of the Act, including Sections 6 and 7, came into force on 21st May 2016.

## Protection of Badgers Act 1992

The main legislation protecting badgers in England and Wales is the Protection of Badgers Act 1992 (the 1992 Act). Under the 1992 Act it is an offence to: wilfully kill, injure, take or attempt to kill, injure or take a badger; dig for a badger; interfere with a badger sett by, damaging a sett or any part thereof, destroying a sett, obstructing access to a sett, causing a dog to enter a sett or disturbing a badger while occupying a sett.

The 1992 Act defines a badger sett as: "any structure or place which displays signs indicating current use by a badger".

## Natural Environment and Rural Communities Act 2006

Section 41 (S41) of this Act requires the Secretary of State to publish a list (in consultation with Natural England) of Habitats and Species which are of Principal Importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal (e.g. planning) functions. The S41 list includes 65 Habitats of Principal Importance and 1,150 Species of Principal Importance.

## The Environment Act 2021

The Environment Act sets statutory targets biodiversity including a target to reverse the decline in species abundance by 2030. As well as confirming that public authorities have a duty to conserve and enhance biodiversity, and making provision for biodiversity gain to be a condition of planning permission in England.

## Hedgerow Regulations 1997

The Hedgerow Regulations were made under Section 97 of the Environment Act 1995 and came into force in 1997. They introduced new arrangements for local planning authorities in England and Wales to protect important hedgerows in the countryside, by controlling their removal through a system of notification. Important hedgerows are defined by complex assessment criteria, which draw on biodiversity features, historical context and the landscape value of the hedgerow.

## The Invasive Alien Species (Enforcement and Permitting) Order 2019 (as amended)

This Order is concerned with the prevention and management of the introduction and spread of invasive alien species.

## Birds of Conservation Concern

This is a review of the status of all birds occurring regularly in the United Kingdom. It is regularly updated and is prepared by leading bird conservation organisations, including the British Trust for Ornithology (BTO), Joint Nature Conservation Committee (JNCC) and The Royal Society for the Protection of Birds (RSPB).

The latest report was produced in 2021 (Eaton *et al*, 2021) and identified 70 red list species, 103 amber species, and 72 green species. The criteria are complex, but generally:

**Red list** species are those that have shown a decline of the breeding population, non-breeding population or breeding range of more than 50% in the last 25 years.

**Amber list** species are those that have shown a decline of the breeding population, non-breeding population or breeding range of between 25% and 50% in the last 25 years. Species that have a UK breeding population of less

than 300 or a non-breeding population of less than 900 individuals are also included, together with those whose 50% of the population is localised in 10 sites or fewer and those whose 20% of the European population is found in the UK.

**Green list** species are all regularly occurring species that do not qualify under any of the red or amber criteria are green listed.

## Global IUCN Red List

The International Union for Conservation of Nature (IUCN) Threatened Species was devised to provide a list of those species that are most at risk of becoming extinct globally. It provides taxonomic, conservation status and distribution information about threatened taxa around the globe.

The system catalogues threatened species into groups of varying levels of threat, which are: Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CE), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Concern (LC), Data Deficient (DD), Not Evaluated (NE). Criteria for designation into each of the categories is complex, and consider several principles.

## Wild Mammals (Protection) Act 1996

This Act offers protects a form of protection to all wild species of mammals, irrespective of other legislation, and focussed on animal welfare, rather than conservation.

Unless covered by one of the exceptions, a person is guilty of an offence if he mutilates, kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering.

It's application is typically restricted to preventing deliberate harm to wildlife (in general) during construction works etc.

## National Planning Policy (Wales)

The national planning policy guidance is found principally in Planning Policy Wales Edition 11 (PPW) dated February 2021 (Welsh Government, 2021). The document is supported by a series of Technical Advice Notes (TANs) with the most relevant for ecology being TAN 5: Nature Conservation and Planning (Welsh Government, 2009), which provides advice on how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation. A summary of the main points relevant to the ecological assessment of the development is provided below.

Paragraph 6.4.2 states that local planning authorities, along with other public bodies, as part of the Environment (Wales) Act 2016 have a duty to take reasonable steps, consistent with the proper exercise of their functions, to further the conservation and enhancement of biodiversity and help maximise contributions to achieve well-being goals.

Paragraph 6.4.3 states that the planning system has a key role to play in helping to reverse the decline in biodiversity and increasing the resilience of ecosystems, at various scales, by ensuring appropriate mechanisms are in place to both protect against loss and to secure enhancement. Addressing the consequences of climate change should be a central part of any measures to conserve biodiversity and the resilience of ecosystems. Development plan strategies, policies and development proposals must consider the need to:

- support the conservation of biodiversity, in particular the conservation of wildlife and habitats;
- ensure action in Wales contributes to meeting international responsibilities and obligations for biodiversity and habitats;
- ensure statutorily and non-statutorily designated sites are properly protected and managed;

- safeguard protected and priority species and existing biodiversity assets from impacts which directly affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water and soil, including peat; and
- secure enhancement of and improvements to ecosystem resilience by improving diversity, condition, extent and connectivity of ecological networks.

Paragraph 6.4.4 states that biodiversity and resilience considerations should be taken into account at an early stage in development planning. All reasonable steps must be taken to maintain and enhance biodiversity and promote the resilience of ecosystems which should be balanced with the wider economic and social needs of business and local communities.

Paragraph 6.4.5 states that planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions, and that development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity. The diversity of, connections between, the scale, the condition and the adaptability of ecosystems must be taken into account.

Paragraphs 6.4.11, 6.4.14 and 6.4.22 state that planning authorities must have regard to the relative significance of international, national and local designations in considering the weight to be attached to nature conservation interests, and that the international and national responsibilities and obligations for conservation should be fully met. Statutorily designated sites must be protected from damage and deterioration, with their important features conserved and enhanced by appropriate management. Statutorily protected species protected under European or UK legislation, or under Section 7 of the Environment (Wales) Act 2016 are material considerations if a development would result in disturbance or harm to the species or its habitat, and the range and population of the species should be sustained

Paragraph 6.4.21 states 'Planning authorities must follow a step-wise approach to maintain and enhance biodiversity and build resilient ecological networks by ensuring that any adverse environmental effects are firstly avoided, then minimized, mitigated, and as a last resort compensated for; enhancement must be secured wherever possible'.

Paragraphs 6.4.24-26 also gives emphasis to the importance of trees, hedgerows and woodlands (especially ancient woodland) and states 'Ancient woodland and semi-natural woodlands and individual ancient, veteran and heritage trees are irreplaceable natural resources, and have significant landscape, biodiversity and cultural value. Such trees and woodlands should be afforded protection from development which would result in their loss or deterioration unless there are significant and clearly defined public benefits; this protection should prevent potentially damaging operations and their unnecessary loss. In the case of a site recorded on the Ancient Woodland Inventory, authorities should consider the advice of NRW.'

Related to these Biodiversity and Ecological Network policies, Section 6.2 gives weight to the protection and enhancement of multi-functional green infrastructure, which is important for sustainable management of natural resources. Green infrastructure should be incorporated into development through appropriate site selection and use of creative design.

Circular Letter CL-05-04 reaffirmed the Welsh Government's commitment to ensuring that designated sites and species of nature conservation importance are protected from damage and deterioration, with their important features conserved by appropriate management. The letter advised that under specific circumstances a pre-commencement condition should be attached to planning consents requiring the applicant to provide the LPA with a copy or their European Protected Species (EPS) Licence (once issued by NRW). The Circular Letter was withdrawn in March 2018 in an attempt to reduce the number of pre-commencement conditions, with LPA's advised to instead use a replacement informative (to be attached to all relevant consent notices) to avoid unnecessary duplication controls of other legislation.

### Wrexham Local Biodiversity Action Plan (LBAP)

Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level) and are usually drawn up by a consortium of local Government organisations and conservation charities.

Some LBAP's may also include Habitat Action Plans (HAP) and/or Species Action Plans (SAP), which are used to guide and inform the local decision-making process.

Within the Wrexham LBAP, policies PS2, PS11, EC4 and EC6 pertain to 'Biodiversity and Development'. A summary of these policies is provided below:

- **Policy PS2**: Development must not materially detrimentally affect countryside, landscape/townscape character, open space, or the quality of the natural environment
- **Policy PS11**: Encouragement will be given to proposals which improve the biodiversity value of sites and to the establishment of local nature reserves where the nature conservation and landscape interest of the land will be protected and enhanced.
- **Policy EC4**: Development proposals should provide for the conservation and management of hedgerows, trees, orchards, woodland, wildlife and other natural landscape and water features, and include new planting in order to enhance the character of the landscape and townscape. Development which results in the loss or significant damage to valuable trees, important hedgerows or ancient woodland sites will not be permitted.
- **Policy EC6**: Development either within or close to sites of biodiversity interest will only be permitted where it can be clearly demonstrated that the need for the development outweighs the need to safeguard the intrinsic nature conservation value of the site. Where such development is permitted, damage should be kept to a minimum, and compensatory measures should be provided. Measures to improve the biodiversity value of sites and enhance their natural conservation interest and landscape quality including the establishment of local nature reserves, will be supported.