WILDIFE ENHANCEMENT PLAN

LAND NORTH OF UNIT 3, THE AIRFIELD, SEATON ROSS, EAST RIDING OF YORKSHIRE for MR. E. ROWBOTTOM

(July 2021) (Contract number 231a)

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PROJECT DATA

Wildlife Enhancement Plan prepared by	Craig Emms and Linda Barnett
Site Address	Land North of Unit 3, The
	Airfield, Seaton Ross, East
	Riding of Yorkshire, YO42 4NF
Local Planning Authority	East Riding of Yorkshire
	Council
Planning Application for:	Erection of a building and
	additional use of land as testing
	area
Application Number:	18/03691/PLF
Central Ordnance Survey Grid Reference	SE 77123 42306
Date Wildlife Enhancement Plan Issued	30 July 2021
Version	Version 1

INTRODUCTION

BACKGROUND TO THE WILDLIFE ENHANCEMENT PLAN

A planning application for the erection of a building and additional use of land as testing area on land North of Unit 3, The Airfield, Seaton Ross, East Riding of Yorkshire, YO42 4NF, was approved by the East Riding of Yorkshire Council on 3rd June 2021.

The Wildlife Enhancement Plan has been prepared to discharge Condition 6 of the planning consent for the site.

Condition 6 states:

Within one month of the commencement of the development hereby permitted, a Wildlife Enhancement Plan (WEP) shall be submitted to and approved in writing by the Local Planning Authority. The WEP shall be compiled by a suitably qualified ecologist and must be over and above any avoidance, mitigation and compensation measures required to neutralise the impacts of the development on wildlife in order to improve the ecological condition of the development site after the development is complete. It shall include: a timetable for implementation; a) a detailed plan showing the locations and specifications of the enhancement measures; b) the enhancement measures outlined in the Preliminary Ecological Survey Report (Emms & Barnett, April 2019) including 4 bird nesting boxes and 4 bat roosting boxes. The development shall be carried out in accordance with the approved details and the enhancements measures retained thereafter unless otherwise agreed in writing by the Local Planning Authority.

Reason: This condition is imposed to comply with paragraph 118 of the National Planning Policy Framework (NPPF), section 40 of the Natural Environment and Rural Communities Act (NERC) 2006 and ERLP Strategy Document policy ENV 4.

The Wildlife Enhancement Plan should be read in conjunction with the Preliminary Ecological Appraisal for the site (Emms and Barnett, 2019). A copy of this document will be retained on site at all times.

SUMMARY OF AGREED WORKS

Site: Erection of a building and additional use of land as testing area

OS Grid Ref.: SE 77123 42306

Locality: the site is located approximately 700m north-west of the small village of Seaton Ross.

Status: none.

Area: approximately 0.4 ha in extent.

Description: The site is part of a farm and is, for the most part, surrounded by arable land, a small block of woodland to the east and industrial units to the south and south-east. Habitats on and adjacent to the site include ephemeral/short perennial vegetation, tall ruderal herb, scattered scrub and woodland.

Objectives:

- To address Condition 6 in the planning consent;
- To comply with statutory planning, biodiversity conservation and ecological regulations;
- To ensure adherence to the plans stamped as approved in the interests of clarity and a satisfactory development.
- To ensure the establishment, appropriate management, and maintenance of the wildlife enhancement measures;
- To appropriately manage the wildlife enhancement measures for biodiversity conservation in accordance with good practice and planning and development requirements;
- To maintain ecological quality and promote biodiversity;
- To promote sound environmental practice by site managers and users.

Prescriptions:

- Implementation of the wildlife enhancement measures;
- Remedial action to maintain quality objectives as may be necessary.

These wildlife enhancement measures have been devised and produced to ensure long-term care and compliance on site with planning conditions, regulations, best practice and the law relating to wildlife, ecology and biodiversity conservation.

WILDLIFE ENHANCEMENT MEASURES

Table 1: Pre-construction wildlife enhancement measures on Land North of Unit 3, The Airfield, Seaton Ross, East Riding of Yorkshire, YO42 4NF

Project	Prescription	Year(s)	Season	Frequency (per year)	Responsibility
Site manager	Appoint a site manager to ensure that the measures prescribed in the plan are upheld and that good environmental practice is observed at all times	Prior to development works commencing	-	Ongoing	Owner
Record keeping	Arrange for a log book of all such maintenance and related events/observations to be kept that can be inspected by statutory authorities and other authorized personnel	Prior to development works commencing	-	Ongoing	Owner
Implementation of mitigation regarding reptiles	Keep the vegetation on the site short through regular strimming /cutting/ mowing (during dry and warm weather conditions). This will reduce the amount of favourable habitat within the site where works will take place and passively move any reptiles into suitable habitat outside of the development footprint. If the land falls out of management before the commencement of construction on the site, consideration should be made for actively managing the above habitats to prevent them becoming more suitable for these species whilst fallow (see Emms and Barnett, 2019).	Prior to development works commencing	May to September	Prior to development works commencing and ongoing	Owner/contractor
Protection of any vulnerable wildlife	A pre-clearance finger-tip search of the development site by a suitably licenced, qualified and experienced ecologist should be conducted immediately prior to site stripping and any vulnerable taxa removed to safety.	Immediately prior to site clearance operations.	-	Once	Ecologist

Implementation	As it is possible that birds nest in the tall ruderal herb	Prior to	September	Prior to	Owner/contractor/ecologist
of mitigation	and scattered scrub on the site and in the edge of the	development	to	development	_
regarding birds	woodland adjacent to the site, the works should be	works	February	works	
	carried out between the months of September to	commencing		commencing	
	February inclusive when nesting birds are less likely to			and ongoing	
	be present.				
	If this is unavoidable, a pre-clearance inspection by a				
	suitably experienced ornithologist will be required				
	immediately prior to development works commencing				
	to identify whether any nests are present, and ensure				
	appropriate action is taken. If the latter approach is				
	taken and nesting is encountered there is a risk of delay				
	since an 'exclusion zone' may need to be set up around				
	active nests until the young have fledged.				
Implementation	Retain and protect the existing trees in the woodland on	Prior to	-	Prior to	Owner/contractor
of tree	the site's boundary in accordance with the Tree Root	development		development	
protection	Protection Measures (see Appendix). Erect protective	works		works	
measures	fencing.	commencing		commencing	
				and ongoing	
Provide bird	Erect 4 bird nest boxes of mixed designs (as detailed in	Prior to	-	Once	Ecologist
habitat nesting	Table 4A) on suitable trees within the woodland	development			
opportunities	adjacent to the site (see Figure 1).	works			
		commencing			
Provide bat	Erect 4 Schwegler bat roosting boxes of mixed designs	Prior to	-	Once	Ecologist
roosting	(as detailed in Table 4B) on suitable trees within the	development			
opportunities	woodland adjacent to the site (see Figure 1).	works			
		commencing			

Table 2: Wildlife enhancement measures during construction on Land North of Unit 3, The Airfield, Seaton Ross, East Riding of Yorkshire, YO42 4NF

Project	Prescription	Year(s)	Season	Frequency (per year)	Responsibility
Unnecessary negative impacts of new lighting at night should be avoided on nocturnal wildlife	To comply with national planning policy framework paragraph 125, unnecessary negative impacts of new lighting at night should be avoided <i>e.g.</i> on plants, bats, invertebrates and astronomy. Possible negative impacts of new lighting should also be minimised by keeping the hours when lighting is used as short as possible, avoiding light spillage by using directional down-lighting, reducing the brightness of necessary illumination and keeping light from shining on bat roost entries, bat flyways and foraging areas and other mammal holes (see Appendix for advice when choosing lighting solutions).	During construction	-	Ongoing	Owner/contractor
Protection of any vulnerable wildlife	Minimise ecological impacts during construction, generally avoiding unnecessary disturbance and pollution. If there are any steep-sided excavations created during construction, ensure they are covered/filled/provided with ramps to prevent any mammals becoming trapped.	During construction	-	Ongoing	Owner/contractor
Implementation of tree protection measures	Monthly monitoring of protective fencing integrity for the trees on the site's boundaries in accordance with the Tree Protection Measures (see Appendix). Repair where necessary.	During construction	-	Ongoing	Contractor

Table 3: Post construction wildlife enhancement measures on Land North of Unit 3, The Airfield, Seaton Ross, East Riding of Yorkshire, YO42 4NF

Project	Prescription	Year(s)	Season	Frequency	Responsibility
				(per year)	
Implementation of	Remove protective barriers from existing trees on the site's	When appropriate	-	Ongoing	Contractor
Tree Protection	boundaries in accordance with the Tree Protection Measures				
Measures	(see Appendix).				

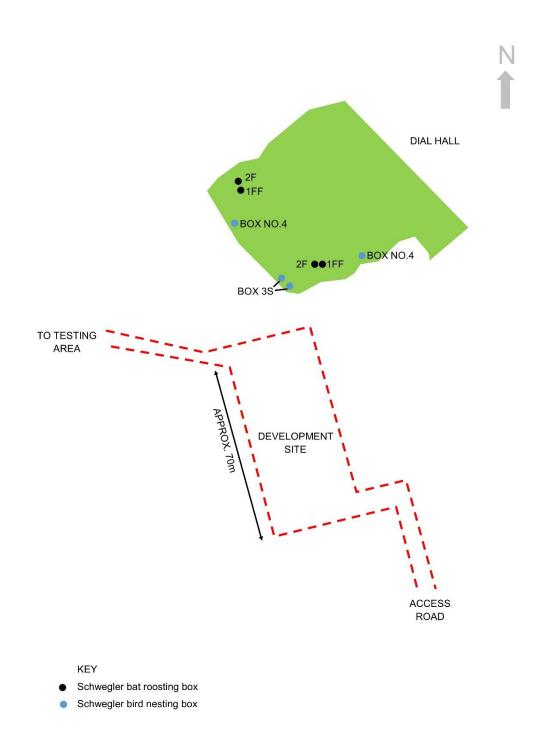
Table 4A: Schwegler bird nesting boxes to be erected on suitable trees in the woodland adjacent to the site.

Schwegler Nest Box Designation	Target bird species	Quantity
Schwegler Starling Box 3S	Starling	2
Schwegler Box No. 4	Stock Dove	2

Table 4B: Schwegler bat roosting boxes to be erected on suitable trees in the woodland adjacent to the site.

Schwegler Bat Box Designation		Quantity
Schwegler 2F	General purpose	2
Schwegler 1FF		2

Figure 1: Showing the proposed locations for bird nesting boxes and bat roosting boxes



REFERENCES

BCT and ILP (2018) *Guidance Note 08/18. Bats and artificial lighting in the UK: Bats and the Built Environment series.* Bat Conservation Trust and Institution of Lighting Professionals. London and Rugby, UK.

Emms, C. and Barnett, L. (2019) *Preliminary Ecological Appraisal of Land North of Unit 3, the Airfield, Seaton Ross, East Riding of Yorkshire YO42 4NF for Mr E. Rowbottom.* Craig Emms and Linda Barnett, Huntingdon, UK.

ILE (2011) Guidance Notes for the Reduction of Obstructive Light. Institution of Lighting Engineers. Rugby, UK.

APPENDIX

TREE PROTECTION MEASURES

Tree root protection areas will be established fully before construction works are commenced. These will be in accordance with the 'British Standard 5837: 2012 Trees in Relation to Design, Demolition and Construction – Recommendations', and will be retained for the duration of development works.

A tree root protection area (RPA) will be created for all trees that are located close to the development works. For single stem trees, the RPA should be calculated as an area equivalent to a circle with a radius 12 times the stem diameter (for calculating the RPA of multi-stemmed trees see British Standard 5837: 2012 pages 10 and 11) and this will be demarcated by protective fencing. The temporary RPA fencing shall consist of Heras Fencing panels and these will be erected prior to any works commencing on the site, including any site clearance works commencing or any equipment, machinery or materials being brought on to the site. The RPAs around the trees will remain in place at all times throughout the construction phases of the development and until all parts of the development have been completed and all equipment; machinery and surplus materials have been removed from the development site.

During construction works the following conditions must be adhered to with regard to the RPAs:

- No fires to be lit in close proximity or within the RPAs;
- No excavation shall occur within the RPAs;
- No change in levels shall occur within the RPAs;
- No storage of materials, vehicles, plant or equipment shall occur within the RPAs;
- No cement or cement mixing shall occur within the RPAs;
- No discharge of liquids shall occur within the RPAs;
- No site facilities shall be placed within the RPAs;
- No passage of vehicles, plant or pedestrians shall occur within the RPAs;
- All static plant placed within 10m of the hedge is to be fully bunded to ensure no fuel leakage is possible into the water table close to the RPAs;
- Care should be exercised when using cranes or similar equipment near the RPAs;

- It is essential that allowances are made for the slope of the ground so that damaging materials such as concrete washings, mortar or fuel oil cannot run towards the RPAs;
- During any works close to the RPAs should the contractor encounter any roots: any root smaller than 35mm diameter should be pruned carefully with a propriety-cutting tool such as a saw or secateurs and roots larger than this will require consultation with an aboriculturalist before severing, as they could be essential to the tree or hedgerow's health.

A copy of this document will be retained on site at all times.

CHOOSING A LIGHTING SOLUTION

Luminaires (lighting enclosures, lanterns, or units designed to distribute light from a lamp or lamps) come in a myriad of different styles, applications and specifications. A lighting professional can help in selecting the most appropriate type. The following should be considered when choosing luminaires (BCT and ILP, 2018):

- All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used;
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability;
- A warm white spectrum (ideally <2700Kelvin) should be adopted to reduce blue light component;
- Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats;
- Internal luminaires can be recessed where installed in proximity to windows to reduce glare and light spill;
- The use of specialist bollard or low-level downward directional luminaires to retain darkness above can be considered. However, this often comes at a cost of unacceptable glare, poor illumination efficiency, a high upward light component and poor facial recognition, and their use should only be as directed by the lighting professional;
- Column heights should be carefully considered to minimise light spill;
- Only luminaires with an upward light ratio of 0% and with good optical control should be used (see ILE, 2011);
- Luminaires should always be mounted on the horizontal, *i.e.* no upward tilt;
- Any external security lighting should be set on motion-sensors and short (1min) timers;
- As a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill and only direct it to where it is needed.

QUALITY ASSURANCE

Craig Emms MSc, MCIEEM Linda Barnett BSc (Hons), PhD, MCIEEM

Craig and Linda are professional ecologists with over 65 years of combined practical experience in nature conservation, wildlife research and management and ecological consultancy, gained from working in the UK and overseas. Craig has a MSc. in Ecosystems Analysis and Governance and Linda has a PhD in Genetics. Together they have carried out original academic research on a broad range of wildlife; insects, amphibians, reptiles, birds and mammals (including bats), and published the results as scientific papers in a number of international peer-reviewed journals. Linda co-authored the Species Action Plans for Britain's eight most endangered butterflies while working for Butterfly Conservation, and has supervised students in research projects on hazel dormouse, great crested newts and moths whilst she was co-ordinating and lecturing on a Masters course in Analytical Biology at the University of Warwick. Craig was also a lecturer in ecological methods on two Masters courses at the University of Warwick. Linda and Craig are skilled and practiced field ecologists, especially with regard to wildlife and countryside management. They are licenced by Natural England as bat and great crested newt surveyors (and are volunteer bat roost visitors/handlers for Natural England and registered bat carers for the Bat Conservation Trust) and have an extensive and broad experience of a great variety of field surveys including mammals (otter, badger, water vole, hedgehog, small mammals and bats), birds, reptiles, amphibians, dragonflies, butterflies and moths. Both have undergone training in the use of eDNA methodology and field sample collection. Craig is also licenced by Natural Resources Wales as a bat and great crested newt surveyor, by the British Trust for Ornithology as a bird nest recorder, and has been the named ecologist and clerk of works on many bat mitigation and compensation (development) licences.

Any information relating to legal matters, designs, specifications, advice, suggestions, or comments written or verbal in this wildlife enhancement plan is provided in good faith and for consideration only, and does not purport in any way to give any advice on or interpretation of the law whatsoever. Professional legal advice should always be sought.

Note. Whilst all due and reasonable care is taken in the preparation of wildlife enhancement plans, Craig Emms and Linda Barnett accept no responsibility whatsoever for any consequences of the release of this strategy to third parties.