

Technical Note

23/02/2022

To Andrew Campbell (Site Agent) Roz Jukes, Environment Agency (NEAS)

From Neil Page MCIEEM Principal Ecologist & ECoW, Capita Real Estate and Infrastructure (CREI)

Subject Hutchinson's Goit – Ecological Update

1. Introduction

1.1. Background

- 1.1.1. Capita Real Estate and Infrastructure (CREI) has entered a contract with the Environment Agency (EA) to assist and inform pre-commencement assessments in relation to clearance of Hutchinson's Goits culvert and addition or access steps from Bury Road, this report is produced to address condition 8 which states:

The development shall be carried out in accordance with all the mitigation measures as outlined within Radcliffe and Redvales FRMS Phase 3 - Swan Lodge Preliminary Ecological Appraisal Report 28 October 2020; which shall include preliminary checks for fauna within the areas affected by the development. Such checks should be undertaken so as not to cause harm to protected River Fauna known to be associated with the immediate locality of the site.

Reason: To ensure that appropriate and informed checks are undertaken in line with good ecological practice and to prevent harm to protected and important species pursuant to NPPF Chapter 15 - Conserving and Enhancing the Natural Environment.

1.2. Purpose of the Technical Note

- 1.2.1. The purpose of this note is to record and provide a site record in relation to the clearance of vegetation on site in anticipation of the forthcoming works. This document provides relevant and comprehensive information and guidance to ensure the protection of ecological features while undertaking permitted operations through the implementation of precautionary actions, compliance with wildlife legislation, compliance with planning policy and best practice.

A high-level appraisal of the habitats present within the survey site was undertaken on the 16/02/2022 of the intended working area, this was inspected in relation to a series of ecological receptors including:

- Proximity to trees and vegetation and sufficient clearance to avoid root protection zones (RPZ).
- Presence of or proximity to nesting bird habitat, birds displaying nesting behaviour and/or active nests or those in the process of being built.
- Proximity to habitat suitable for supporting reptiles or amphibians.
- Presence of or proximity to any other sensitive, protected, or notable ecological receptors.

Surveyor Experience

- 1.2.2. Neil Page, Principal Ecologist, attended site on the 16 February 2022 to conduct the site walkover. Neil is a Full Member of CIEEM. He has over twelve years' experience working in ecology and conservation. Neil has worked on a wide range of projects including large infrastructure developments and flood alleviation projects.
- 1.2.3. The development proposals were reviewed to establish the likely extent of scheme impacts and the ecological receptors that might be affected (the Zone of Influence (Zol)). The initial review considered the likelihood of particular ecological receptors being present at the site or within the relevant Zol.
- 1.2.4. Where this confidently concluded that a particular receptor is likely absent, these were not considered further. The following reports were reviewed in preparation of this document;
- General arrangement plan ENV0000389C-BMM-DZ-4WR-DR-S-0213437-S3-P03
 - Preliminary Ecological Appraisal Report ENV0000389C-BMM-DZ-4ZZ-RP-EN-0301061
 - BAA.2050 Radcliffe and Redvales FRMS Phase 2 Invasive Species Management Plan
 - ENV0000389C-BMM-DZ-4ZZ-RP-EN-0301061 Swan Lodge Preliminary Ecological Appraisal
 - ENV0000389C-BMM-DZ-SL-TN-EN-0301069-S2-P01 Swan Lodge eDNA HSI
 - ENV0000389C-BMM-DZ-SL-TN-EN-0301073-S2-P01 Swan Lodge Reptile Survey Tech Note
 - ENV0000389C-BMM-DZ-SL-TN-EN-0301074-S2-P01 Swan Lodge Water Vole and Otter TN
 - ENV0000389C-BMM-DZ-SL-TN-EN-0301067-P01 Swan Lodge PRA Bat Roost Assessment
 - AP001-R&R-BAM-Hutchinson's Goyt Activity Plan
- 1.2.5. This document and its content are considered to be valid for up to 12 months from the date of its submission.

Field Methodology

- 1.2.6. The walkover and habitat survey followed the methodology outlined in the JNCC's (revised 2016) Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit¹.
- 1.2.7. The survey was extended to include preliminary assessments for protected species including the following species and species groups:
- **Bats and birds** - trees on the site that are likely to be impacted by the development were assessed for their potential to be used by roosting bats. This is called a Preliminary Roost Assessment (PRA) and includes a systematic search around any structures on site and of any suitable trees noting any potential access or roosting points as well as physical signs of bats (e.g. droppings and staining). Trees and structures will be categorised as to their potential to support bats as well as recording every suspected nest/nest site within the proposed work site or potential to provide nesting habitat.
 - **Otter**- this will be carried out following the standard methodology. This involves a search for: droppings (spraints), footprints, feeding remains, lying-up areas, holts (permanent places of rest and shelter) and areas of habitat considered suitable for otters.
 - **Water vole**– the site and land within 30 m of the site boundary were assessed for habitat suitability for this species. This will include an assessment of the foraging resources, the suitability of the banks for burrowing and the presence of adequate cover / shelter.

¹ JNCC, (2016), Handbook for Phase 1 habitat survey - a technique for environmental audit, ISBN 0 86139 636 7

- **Reptile** – all parts of the site were assessed to determine whether they provide suitable breeding, refugia and hibernation sites. Suitable habitat will be noted and mapped.

1.3. Relevant Legislation

Habitats

- 1.3.1. Certain habitats are recognised as Habitats of Principal Importance under Section 41 the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of this Act places a statutory duty on public bodies, such that *“every public body must, in exercising its functions have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity”*. Section 41 of the same Act requires the Secretary of State to draw up a list of Habitats and Species of Principal Importance which should be used to guide decision makers (which include the EA and local authorities) in implementing their duty under Section 40.

Reptiles

- 1.3.2. Common lizard, slow worm and grass snake are all afforded protection under the Wildlife & Countryside Act 1981 (as amended). Under this legislation it is an offence to intentionally or recklessly kill or injure these species. As such it is necessary for developers to demonstrate that reasonable measures have been taken to avoid such an eventuality. In addition, all three species have been listed as Species of Principal Importance under Section 41 of the NERC Act 2006.

Nesting Birds

- 1.3.3. All birds, their nests and eggs are protected by law under Part 1 of the Wildlife & Countryside Act 1981 (as amended). Under this legislation it is an offence to injure or kill a nesting bird, and/or damage or destroy an active bird's nest. Species listed on Schedule 1 of the Wildlife & Countryside Act (1981 as amended) are afforded special protection and for these species it is also an offence to disturb birds while they are building or at a nest, or to disturb the dependent young of such a bird.

Bats

- 1.3.4. In Britain all bat species and their roosts are legally protected, by both the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife & Countryside Act (1981 as amended). This means you may be committing a criminal offence if you deliberately capture, injure or kill bats, deliberately disturb bats, or damage or destroy a breeding site or resting place of a bat; this applies whether bats are present or not. In addition, obstructing access to any structure or place which an animal uses for shelter or protection is also an offence.

Otter

- 1.3.5. Otters are designated and protected as European protected species (EPS).are protected under the Conservation of Habitats and Species Regulations 2017 (as amended). It is an offence to deliberately kill, injure or capture them, damage or destroy a breeding or resting site. It is also an offence under the Wildlife & Countryside Act (1981 as amended) to obstruct a place use as shelter and movement of otters.

Invasive Non-Native Species

- 1.3.6. Under Section 14 of the Wildlife & Countryside Act 1981 (as amended), it is an offence to plant or otherwise cause to grow in the wild any plant which is included in Part II of Schedule 9 of the same Act.

2. Findings, Impacts and Mitigation

- 2.1.1. The results of the Motts MacDonald 2021 PEA² remain valid and the recommendations are deemed proportionate to the scheme. As a result, no further species-specific surveys are required however the following recommendations are made.

Reptiles

- 2.1.2. The area surrounding the scheme may provide suitable habitat for foraging and basking reptiles due to the mosaic of habitats, as well as varied landforms allowing basking and sheltering behaviour on the embankment slopes.
- 2.1.3. However, only a small area of sub-optimal reptile habitat will be temporarily impacted within the Zone of Influence (Zol). This includes a large expanse of bare ground and rough grassland which is regularly disturbed by recreational use and the temporary loss of this habitat is not considered to be detrimental to the existing reptile populations potentially found within the wider area.
- 2.1.4. Works must ensure that any transitory reptiles which may be using the working area are protected from harm during the construction process. It was therefore advised by the appointed ECoW that a precautionary approach, as described below, is undertaken to reduce any residual risk to reptiles. This involves works being undertaken on the embankment habitat to passively displace any reptiles into unaffected areas.
- 2.1.5. The areas affected were hand searched by an appropriately experienced ecologist and ECoW. The footprint of the works was mown to a reduced sward (<10cm) and the search repeated. All vegetation was then be reduced to bare soil surface leaving the area unsuitable prior to operations upon commencement of works on the week commencing 21st February 2022, allowing works to continue unconstrained.

Nesting Birds

- 2.1.6. Scattered scrub, ditch margins and marshy grassland provided suitable habitats for supporting a range of bird species.
- 2.1.7. A nesting bird check was undertaken prior to the removal of any vegetation and undertaken outside the nesting bird season March to August (*respectively*). The Ecological Clerk of Works (ECoW) was in attendance to oversee the removal of the vegetation in order to protect any faunal species that may be present.

Bats

- 2.1.8. No trees within the scheme have the potential for supporting roosting bats based on Bat Conservation Trust survey guidelines (BCT, 2016)³ and they are considered to be of negligible suitability for supporting roosting bats.
- 2.1.9. The culvert structure was not fully explored due to the high-water level during the survey with the water level above keystone of the aperture. This allows for the determination that the culvert is not likely to be suitable to support roosting bats due to periodic inundation, however a loose mortar joint was identified below the current coping stone section (refer to Image 1). This was also determined to

² Mott MacDonald (2021). Swan Lodge Preliminary Ecological Appraisal. February 2022

³ Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists —Good Practice Guidelines, 3rd edition, Bat Conservation Trust, London

be currently unsuitable due to its damp condition and the penetration of ground water through the mortar. However, this may provide low potential summer roosting potential, but works are considered short in duration been completed by the end of February prior to the active season.



Photo. 1 Engineers Photo showing void in mortar (Indicated :taken prior to high rainfall event)

2.1.10. Therefore, bats are not considered a receptor to these works.

Otter

- 2.1.11. There were no tracks or otter spraints observed during the survey. Habitat is limited for otters due to the open structure of habitats surrounding the Scheme, as well as the regular disturbance through recreational use. The site, as part of the wider Irwell catchment, has potential to provide feeding areas as well as dispersal routes as part of the larger river catchment for otters.
- 2.1.12. Based on the limited suitability of the habitats within the working area, otters are considered a transitory receptor to the scheme only.
- 2.1.13. The only potential impact is in relation to construction and disturbance of foraging habitat. Impacts on commuting will be avoided as working areas will remain unlit during non-working hours.
- 2.1.14. Contractor and subcontractor personnel should be made aware of the presence of otter around the catchment and the importance of pollution prevention and unobstructed access in relation to otter.
- 2.1.15. Excavations and trenches should be left open for minimal durations to avoid otter being entrapped and injured. Deep excavations should be provided with egress points (ledges/ramps) and covered overnight or when not actively worked. Excavations should be checked for the presence of otter and wildlife before being filled.
- 2.1.16. In the unlikely event of discovering any evidence suggesting otter presence within the footprint of the works, work must stop immediately and the ECoW or suitably qualified ecologist should be contacted for advice on how to proceed.
- 2.1.17. Working within the hours of dusk and dawn (~/+ two hours), should be avoided wherever possible. Where this is not possible, lighting should be focussed on the works area(s) and directed away from river and areas of potential otter foraging such as ditches and scrub habitat and the riverbanks.

- 2.1.18. Works must allow the passage of otter through the culvert and fencing must allow adequate clearance along the Goit (watercourse) to facilitate nocturnal movement (50cm stand-off or gap beneath fences).

Water vole

- 2.1.19. No field signs of water vole were observed during the survey. No burrows are present along the banks and no evidence of latrines or feeding stations were observed. Bank profiles are not conducive to water vole habitation due to the shallow profile and limited height of bankside, as well as regular disturbance and presence of mink within the catchment.

Based on the limited suitability of the habitats within the working area, water vole is not considered likely to be impacted by the scheme

Invasive Non-Native Species (INNS)

No INNS were found within the site or within the area of construction. However, construction should be carried out in accordance with the report BAA.2050 Radcliffe and Redvales FRMS Phase 2 Invasive Species Management Plan Hutchison's Goit – Bury Road and clear control and biosecurity measures must be undertaken to prevent spread and detriment to the area.

- 2.1.20. The enhancements described below in Table 1 are suggested to provide additional benefit to the scheme and proportionate to level of disturbance these can be managed in accordance with the existing Construction and Ecological Management Plan implemented on the wider scheme.

Table 1 Summary of impacts and Mitigation

<u>Receptor</u>	<u>Impact Associated with Scheme</u>	<u>Proposed Mitigation</u>	<u>Enhancement</u>
Species-poor semi-improved grassland	Impacting these habitats through removal or degradation would cause a net loss of biodiversity and reduce the habitat connectivity for protected species across the site.	Reinstate and seed after works are complete	In order to address the net loss of biodiversity it will be necessary to replace grassland habitat with a suitable species-rich seed mix. Species mix to provide a diverse range of plants to support a wide range of invertebrates throughout the spring and summer in line with the CEH Guidance "Habitat Creation and Management for Pollinators". It is recommended the species mix comprises early flowering species such as: Flowering species: Kidney vetch (<i>Anthyllis vulneraria</i>) Meadow vetchling (<i>Lathyrus pratensis</i>) Vipers bugloss (<i>Echium vulgare</i>) Yellow rattle (<i>Rhinanthus minor</i>) Cowslip (<i>Primula veris</i>) Red clover (<i>Trifolium pratensis</i>) Cat's ear (<i>Hypochaeris radicata</i>) Dandelion (<i>Taraxacum agg</i>) Grasses: Chewings fescue (<i>Festuca rubra subsp. commutata</i>)

<u>Receptor</u>	<u>Impact Associated with Scheme</u>	<u>Proposed Mitigation</u>	<u>Enhancement</u>
			Slender Red fescue (<i>Festuca rubra</i>) Crested Dogs-tail (<i>Cynosurus cristatus</i>) Smooth-stalked meadow grass (<i>Poa pratensis</i>). In addition, a mid-summer seed mix will be included comprising species such as: Flowering species: Field scabious (<i>Knautia arvensis</i>) Meadow cranesbill (<i>Geranium pratense</i>) Tufted vetch (<i>Vicia cracca</i>) Meadow vetchling (<i>Lathyrus pratensis</i>) Salad burnet (<i>Sanguisorba minor</i>) Yellow rattle (<i>Rhinanthus minor</i>) Common knapweed (<i>Centaurea nigra</i>) Bird's-foot trefoil (<i>Lotus corniculatus</i>) Musk Mallow (<i>Malva moschata</i>) Meadow buttercup (<i>Ranunculus acris</i>) Common sorrel (<i>Rumex acetosa</i>) Hedge woundwort (<i>Stachys sylvatica</i>) Red campion (<i>Silene dioica</i>) Red clover (<i>Trifolium pratensis</i>) Lady's bedstraw (<i>Galium verum</i>) Rough hawkbit (<i>Leontodon hispidus</i>) Self-heal (<i>Prunella vulgaris</i>) Cowslip (<i>Prunella veris</i>) Oxeye daisy (<i>Leucanthemum vulgare</i>) Yarrow (<i>Achillea millefolium</i>) Hoary plantain (<i>Plantago media</i>) Grasses: Chewings fescue (<i>Festuca rubra</i> subsp. <i>commutata</i>) Slender Red fescue (<i>Festuca rubra</i>) Crested Dogs-tail (<i>Cynosurus cristatus</i>) Smooth-stalked meadow grass (<i>Poa pratensis</i>). If timings allow, the existing grassland will be cut for green hay which will be used to assist in the reseeding of the above area to address the loss of this grassland.
Nesting Birds	Habitat loss and the risk of killing or injuring birds, or damaging or destroying their eggs or nests during site enabling works and construction	Limited Mitigation	To mitigate for the habitat loss within the scheme, surrounding habitats would be improved for nesting birds, for example, by erecting bird boxes.
Commuting / Foraging Bats	Light, and visual disturbance	Works in the twilight hours (1 +/- of dusk and dawn) should be avoided where possible.	No mitigation is required, and works are temporary. The new embankment will provide an additional foraging and commuting feature.

<u>Receptor</u>	<u>Impact Associated with Scheme</u>	<u>Proposed Mitigation</u>	<u>Enhancement</u>
		Lighting to be installed low and at a minimum brightness as practical to reduce light spill. Hood or cowl filters fitted to focus light to where it is needed. Illumination of features suitable for commuting of foraging bats to be avoided where possible such as woodland blocks, hedgerows, and the ditches	
Reptile	Habitat loss and the risk of killing or injuring reptiles during site enabling works	With vegetation to be cut in 5 cm increments and checked by the Ecologist or ECoW at each stage. Any piles of wood, debris or other material within the working area would be dismantled by the contractors on site under the supervision of an ecologist. Sward will be maintained at a short 5cm sward to deter reptiles from returning to the area.	Construction of 'refuge areas' and dead wood piles within the wider site would offer valuable refugia and basking area for common reptiles' species.
Otter	Obstruction of passage and commuting	Works in the twilight hours (1 +/- of dusk and dawn should be avoided where possible.	Otter

I hope this technical report provides sufficient information to inform the intended works and if I can provide any other additional assistance, please let me know.

Yours sincerely



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Peer reviewed by Tabatha Boniface BSc (Hons) CEnv MCIEEM Technical Director of Ecology