



Construction Environment Management Plan (CEMP: Biodiversity)

Land off Rockingham Roundabout

Gregory Projects (Barnsley) Limited

Report Ref. ER-3806-07

Date: 06/04/2022

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Date	06/04/2022

The information which we have prepared and provided is true and has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions. This report does not constitute legal advice.



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Introduction

This document has been produced for Gregory Projects (Barnsley) Limited to show how their proposed development Site at Land off Rockingham Roundabout can be built out without impacting on important ecological features.

This document is produced with reference to British Standard 42020 Clause 10.2 Construction Environment Management Plan (CEMP).

The purpose of a CEMP (Biodiversity) is to identify risks to biodiversity during the construction phase, evaluate the level of risk and supply methods for the management of these.

In producing this plan, the following information sources are referred to:

- Brooks Ecological, Ecological Impact Assessment. Report Ref. ER-3806-05. March 2021.
- The Harris Partnership Architects, Proposed Site Plan. Drawing No. 15315-(P)111 Rev. M. (01/04/2022).

Responsible Persons & Lines of Communication

Where appropriate, an Ecological Clerk of Works (ECoW) will be appointed by Gregory Projects (Barnsley) Limited Ltd prior to any activity commencing on site.

Gregory Projects (Barnsley) Limited will formalise lines of communication with the ECoW establishing who within their operation is responsible for actions on site prior to any work commencing. These links will be maintained until such a time as a Site Manager is appointed and assumes this responsibility.

Gregory Projects (Barnsley) Limited is responsible for maintenance of protection and exclusion fencing, however the ECoW will check fencing on each visit and immediately bring issues to the attention of the Project Manager or Site Manager.

Gregory Projects (Barnsley) Limited Ltd is responsible for compliance with regulations, legal consents, planning conditions, environmental procedures and contractual agreements and the issuing of periodic reports on success and compliance.

These periodic reports will feedback into the CEMP for the subsequent phase(s) and Gregory Projects (Barnsley) Limited will ensure the results of this review are effectively communicated to on-site staff.



The Role of an Ecological Clerk of Works

The ECoW will be a suitably trained and experienced professional ecologist who is a member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

The ECoW will carry out all ecological surveys and watching briefs.

The ECoW will deliver a tool box talk to site workers prior to any clearance commencing.

The ECoW will make periodic monitoring visits to check the integrity of any fencing and monitor site activities (pollution control). On each visit to the site, the ECoW will monitor the activities and assess for compliance with this CEMP (Biodiversity).

A Site Inspection Certificate will be issued to Gregory Projects (Barnsley) Limited following this with any recommendations highlighted. Gregory Projects (Barnsley) Limited will take all measures necessary to comply with the recommendations. ECoW visits will be carried out according to Site conditions.

The Site Manager will call the ECoW to site as soon as any of the following emergency events occur:

Encountering protected species

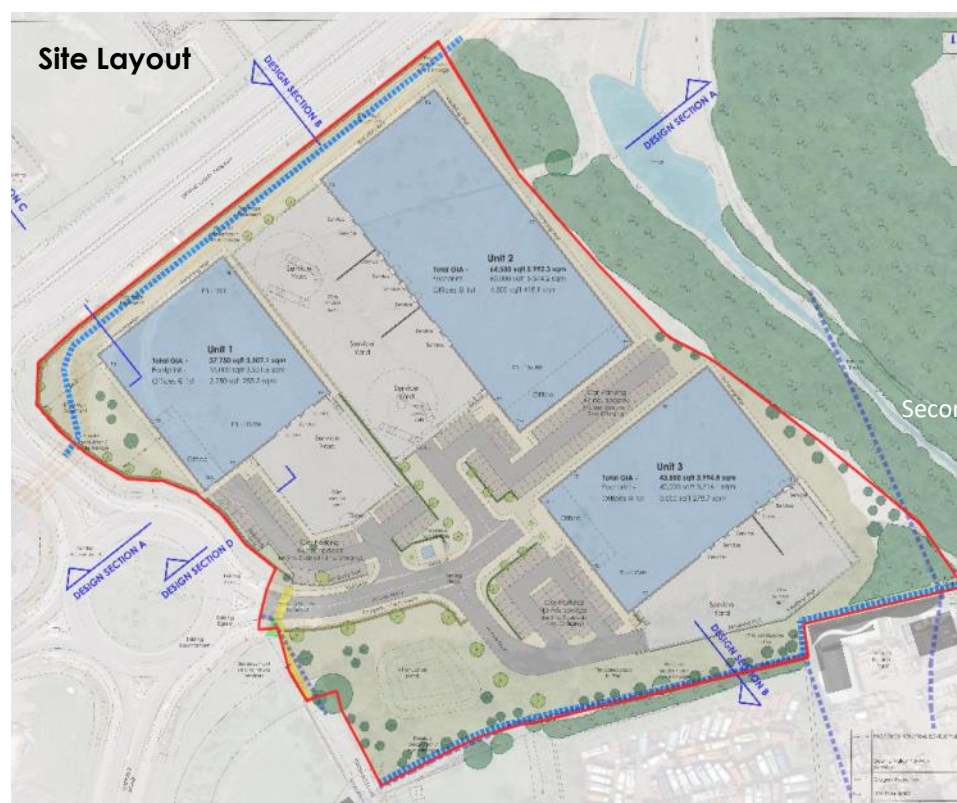
Should any protected species (or nesting birds) be encountered during any phase the ECoW will be consulted.

Any advice provided to ensure that wildlife offences are not committed will be followed.

This could include curtailing works in part or all the site until appropriate species mitigation, licensing or agreed avoidance measures be secured.

Damage to retained habitats

The Site manager will follow the advice of the ECoW to ensure that the careful like for like restoration of habitats damaged is enacted in the first available season. This may include replanting, re-seeding and appropriate establishment management.



Risk Assessment of Potentially Damaging Development Activities

Constraints

The Site supports a mix of habitat, including neutral grassland, hedgerows and young broadleaf woodland. These are assessed as being of no more than Site Level importance within the Ecological Impact Assessment (EclA).

Detailed studies were undertaken into great crested newt (GCN), breeding birds, reptiles and bats. The likely absence of GCN was concluded, whilst no evidence of reptiles activity was observed.

Low levels of bat activity were recorded along the Site's eastern boundary, and above offsite habitat to the east. A sensitive lighting strategy will be required to demonstrate how this valued off-site habitat will be maintained as 'dark zones' for nocturnal wildlife.

The Site was assessed as being of limited value to breeding birds and further detailed survey were scoped out at the PEA stage. However, through consultation, Breeding Bird Surveys were specifically requested by the Local Planning Authority, with willow tit raised as a potential bird of interest. Breeding bird surveys are currently underway, with the first visit in early April 2022. This recorded only limited bird activity on Site, with the only species of note being dunnoek (Amber list species). All other birds were common garden species in low numbers. No signs of willow tit were observed on Site, and the Site is considered unlikely to be of value to this species, due to the immature stature of trees present, and the lack of any old or decaying wood. Breeding bird are therefore not identified as a constraint at this stage.

Pre-works check were also recommended for badgers and ecological support during habitat removal and construction was recommended to mitigate the minimal risk of impact to reptiles and avoid impacts to nesting birds.

Table 1 Ecological constraints

Habitat/ Feature	Protected/ Notable species
Boundary habitats	Nesting birds
	Bats (Foraging)
	Common amphibians
	Notable mammals (Hedgehog)

Impacts

Impacts on biodiversity features and associated fauna fall into the following broad categories:

- Vegetation clearance;
- Soil stripping;
- Re-spreading soil and stored materials; and
- Noise generation and disturbance.

Construction Stages

i) Site clearance and soil stripping

Trees and woody vegetation are usually removed by a forestry or arboricultural contractor using either a large driven mulching machine which chops arisings and incorporates with the soil, or locally by hand machinery with material being chipped and spread, piled or removed.

Large excavators scrape back soil to create clear development platforms. Topsoil is taken by dumper to soil stores on Site, where it can be left for many months before being reused on Site.

This phase presents the greatest risk to nesting birds and the health of retained hedgerows and trees.

ii) Installing drainage

Creating drainage will require localised vegetation clearance away from the development platforms. Machinery will excavate trenches for pipes and the trenches will be backfilled and seeded. This process is anticipated to be completed within 1 month of commencing.

iii) Installing roads and sewers

This is normally completed by a contractor digging into the cleared development platforms as the first construction activity.

iv) Building out cleared plots

Sequential build out of plots according to phasing plan.

Typical activities which require Ecological Clerk of Works (ECOW) overseeing are likely to be; clearing any remaining bird nesting habitat or clearance of soil stores (which could have been used by fauna such as badger /fox).



Potentially Damaging Development Activities

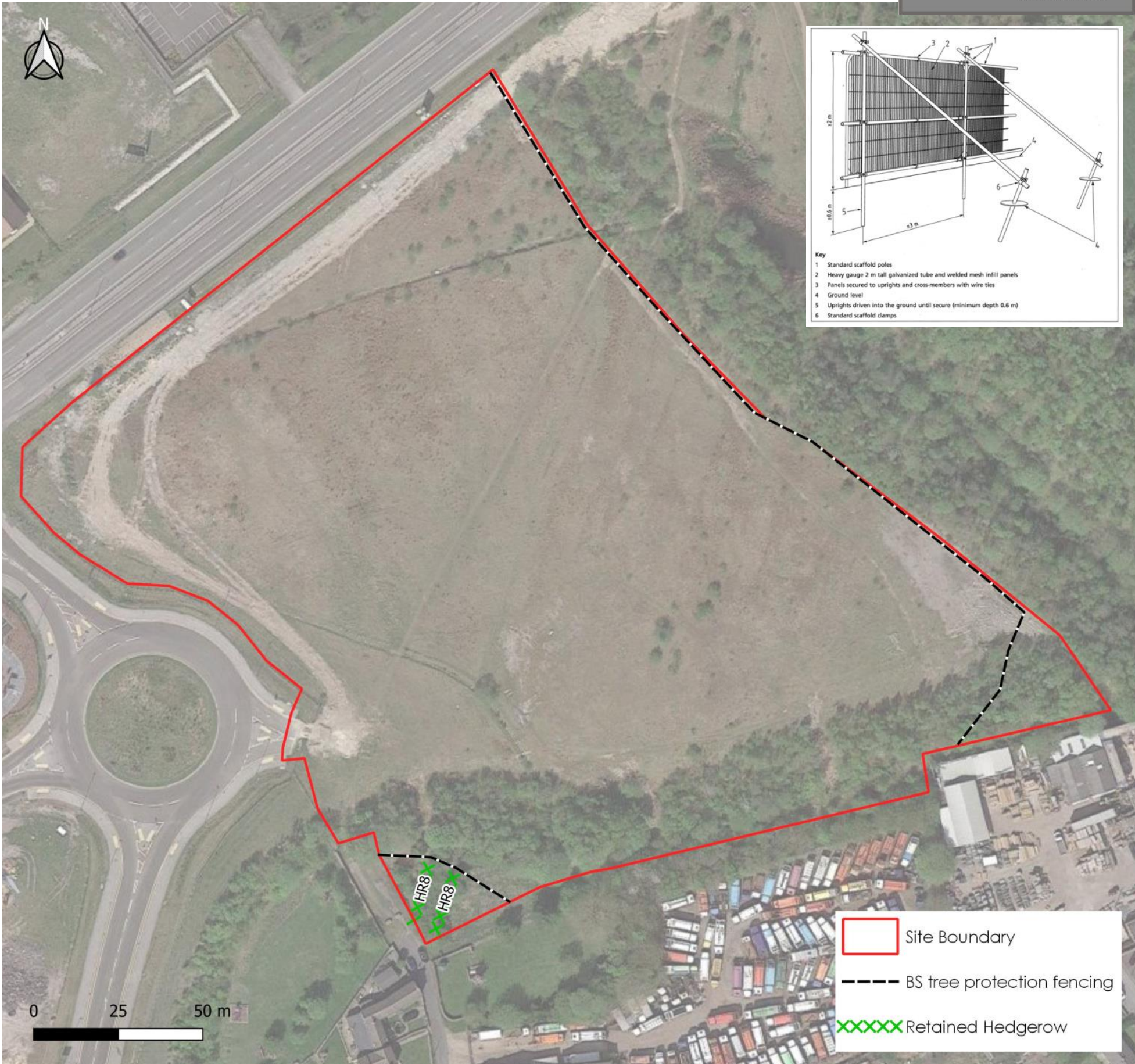
High Risk: Unnecessary damage to retained boundary trees and woodland edge

Without adequate protection in place, development poses a significant risk of adversely affecting retained hedgerows and trees along the Site's north eastern and southern corner boundaries.

Risks includes excavation within the root protection areas (RPA) leading to root severance, or compaction of the RPA through vehicular movement and storage of materials. There is also a risk of hazardous chemical spills within the RPA or physical damage to canopies through collisions with vehicles.

Control 1: BS5837 fencing

- 1. Fencing according to the site's tree protection plan will be followed. The figure opposite is illustrative only.
- 2. Fencing will be installed prior to site clearance following the plan in the Arboricultural Impact assessment.
- 3. Fencing position will be checked by the ECoW prior to site soil stripping.



Potentially Damaging Development Activities

Moderate Risk: Destroying bird nests

Works which require the removal of rough grassland, scrub and young woodland presents a moderate risk of affecting nesting birds, contrary to the Wildlife and Countryside Act (1981). The whole site has potential for nesting birds to be present.

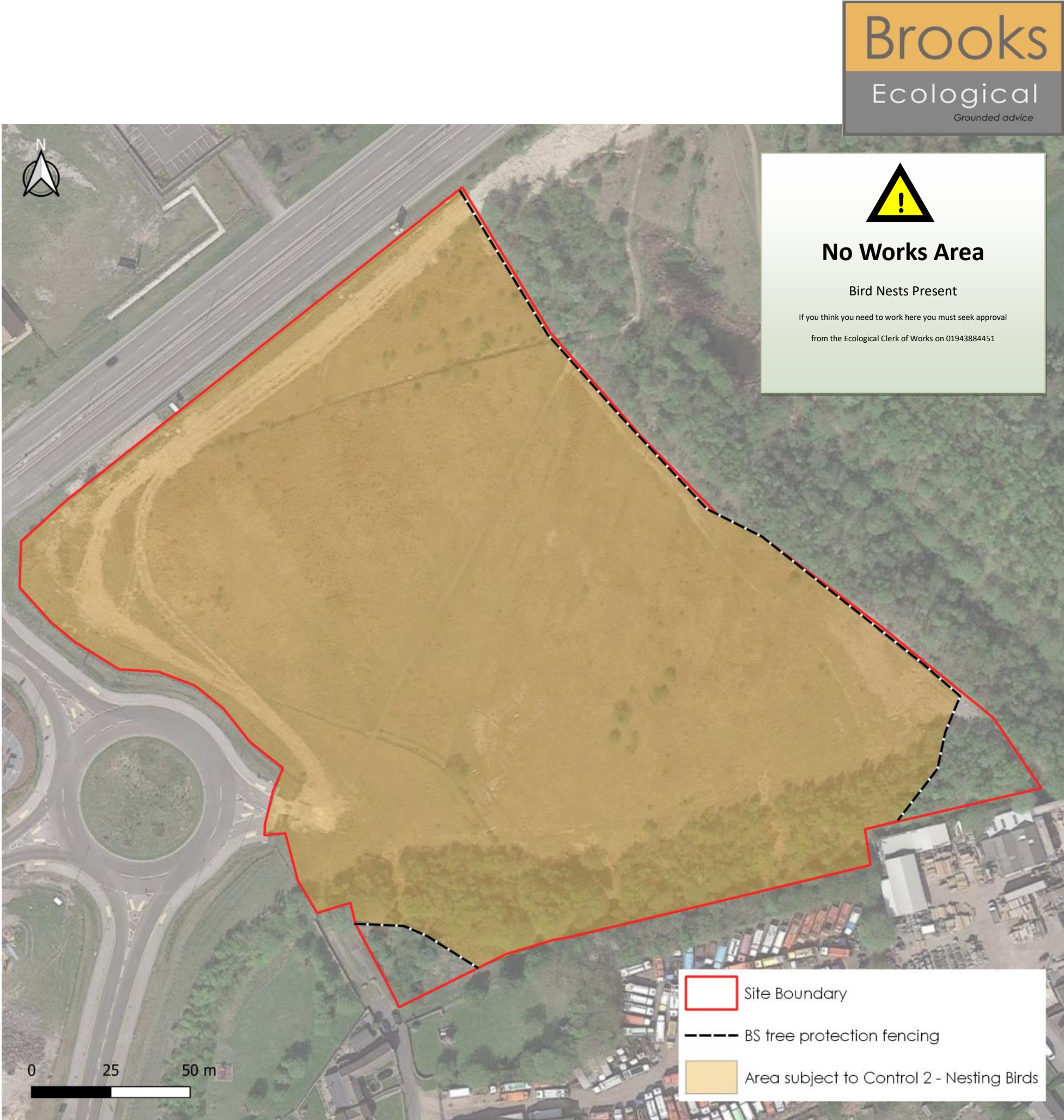
Control 2 : Timing and Survey

Timing: The site will be cleared outside of the bird nesting season (in period September—February).

Survey: Where this is not possible or sections have been missed and need to be cleared in the period March to August the ECoW will carry out nesting surveys of the vegetation to be affected. The area shaded yellow is subject to this control.

If nests are found these will be demarcated on the ground and works will avoid them until birds have fledged or abandoned the nest. An ecologist inspection report will be produced before works continue.

In areas where vegetation is too dense to allow the ECoW to conclude likely absence of a nest the ECoW will supervise vegetation clearance. Only hand held brush cutters will be used in these areas. The ECoW will direct cutting until such a time that they are happy that no nests are present



Potentially Damaging Development Activities

Moderate Risk: Injuring / killing fauna during site clearance and preparation

Although no field signs were discovered during the initial survey, there is the potential for the Site to support notable species such as hedgehogs and other small mammals, common amphibians and occasionally reptiles.

A precautionary appropriate to vegetation clearance is therefore recommended.

Control 3: Directional clearance

All vegetation clearance works will be undertaken between April and October, inclusive; when it could be expected that all fauna likely to be present on Site would be active and not in hibernation.

Clearance works will begin along the western boundary, and progress gradually in a directional manner, moving steadily from west to east. This will then direct any wildlife present within the Site outwards into suitable offsite vegetation to the west.

Hand tools will be used wherever feasible. If a flail mower is to be used, this will first be set to cut vegetation no shorter than 200mm. The entire Site will be flailed at this height, in a direction manner as described. The Site will then be left for a minimum of 48 hours.

The flail will then be set to a shorter height, and the Site cleared once again, progressing in a directional manner from east to west.



Potentially Damaging Development Activities

Low Risk: Injuring / killing fauna during Construction

Although no field signs were discovered during the initial survey, there is the potential for low numbers of notable species such as hedgehogs and other small mammals, common amphibians and occasionally reptiles to be active within the surrounding land. These animals may occasionally stray into the construction site and be in danger of injury or death. Reasonable precautions should therefore be undertaken during the construction period.

Control 4: Reasonable Working Precautions

During initial Site clearance works, at least 3 substantial log piles (measuring at least 2m x 2m x 1m) will be created along the eastern boundary within the woodland edge, from timber felled on Site.

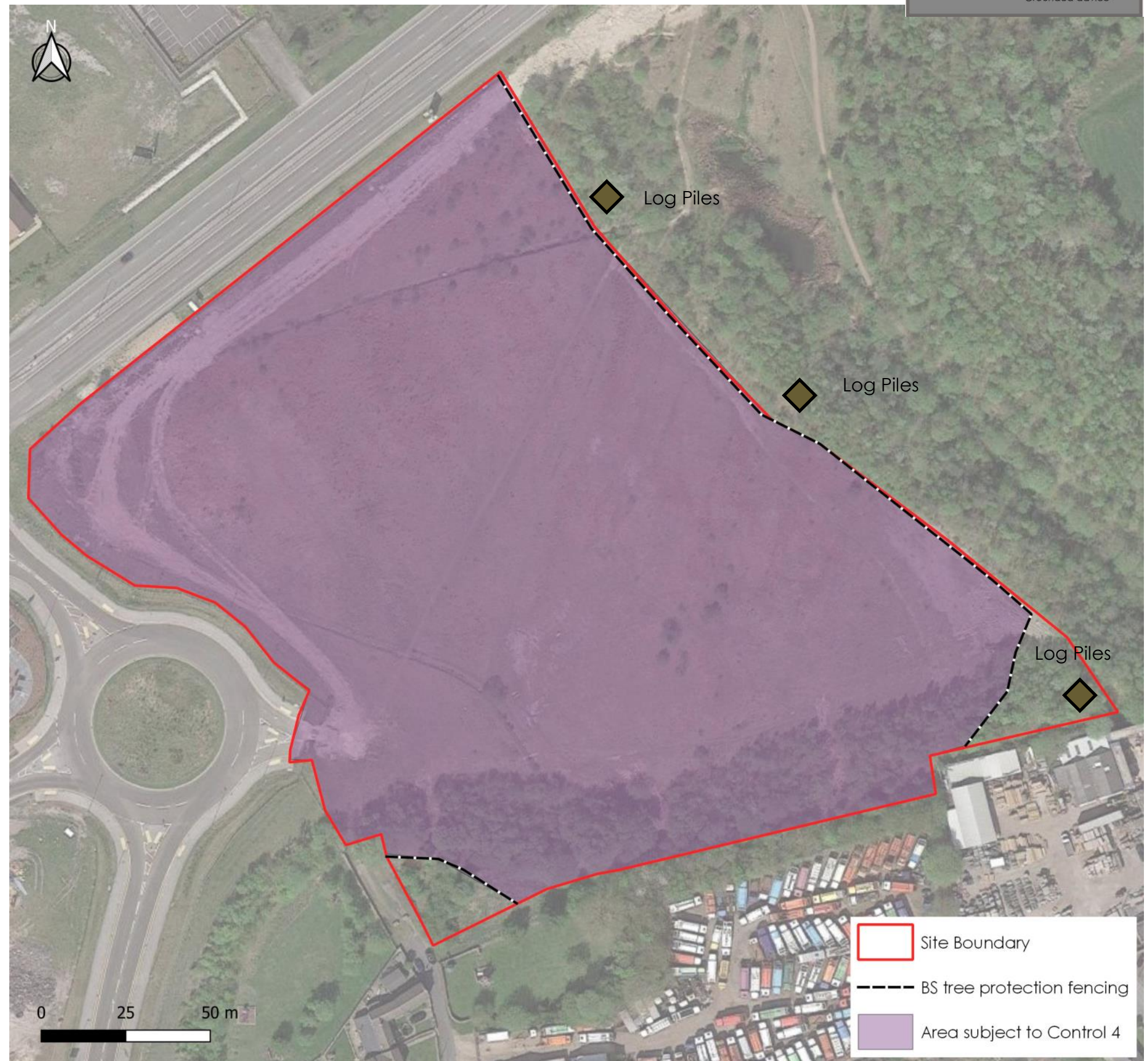
Prior to any construction works commencing, the ECoW will deliver a toolbox talk to the Site Manager, with this information then being disseminated out to all contractors working on Site via the Site Induction process.

The Toolbox talk will outline the species / groups that could reasonably be expected to occur on Site during construction (i.e. hedgehogs, common amphibian, grass snake), with a clear identification/information sheet provided that will be pinned up in a prominent location on the Notice Board.

Information will be provided about where these species / groups could be expected to be found on Site (i.e. under stored equipment/material). If found, and if safe to do so, contractors will be asked to move animals out of the construction zone, and release them into one of the pre-made log piles. Where this is not possible to do safely, the ECoW will be invited to visit Site to effect the translocation.

The information sheet will include information on GCN and how to distinguish these from other herpetofauna. Where there is any suspicion that a GCN has been found, all work in that area will stop immediately, and the ECoW contacted to confirm identification and to provide advice.

Any pits or trenches created with vertical, or steep sides will be filled in or covered at the end of each working day. Where this is not feasible, some form of escape will be provided, such as fitting an earth or scaffold board ramp. These pits will then be inspected by the Site Manager first thing the next morning, and any wildlife relocated to the log piles.



Potentially Damaging Development Activities

Moderate Risk: Disturbing nocturnal fauna (bats)

Without precautionary controls in place, artificial lighting used during works poses a moderate risk of causing disturbance to bats and other nocturnal animals which are present in peripheral off-Site habitat areas.



Control 5 : Lighting Plan

A strategic plan to control artificial lighting will provide measures to remove light spill into the zones indicated in the plan right, and maintain these as protected dark zones.

Lighting can be controlled through a variety of mechanisms which control the location, height, direction, intensity, duration, frequency, and beam of light sources.

1. If the Site is to be trafficked at night, perimeter fencing adjacent to the dark zone should incorporate light-screening material to prevent headlight illumination, or arc lighting.
2. On-Site construction lighting to be directed away from the protected dark zones throughout the construction phase through considered placement of lighting towers and use of directional lighting baffles.
3. The Site's Lighting Strategy will demonstrate the avoidance of impacts to these areas during operation, as seen in the figure opposite.



Work Schedule

The work schedule below outlines when the tasks required should be carried out, and whether input is required from the ECoW.



Task	ECoW to direct	ECoW to carry out	At Setting out stage	Prior to any work in identified areas	Other timing considerations
Control 1 Tree Protection Fencing			Yes	Yes	Prior to any works commencing on Site
Control 2 Nesting birds		Yes		Yes	Survey required if vegetation clearance undertaken between March and August, inclusive
Control 3 Directional clearance	Yes				Ideally undertaken between April and October
Control 4 Reasonable Working Precautions					
Control 5 Sensitive Lighting Strategy				Yes	
ECoW monitoring and reporting.		Yes		Yes	
ECoW available for unforeseen issues and supervision		Yes	Yes	Yes	Provide suitable notice to arrange Site visits