Construction Ecological Management Plan: Biodiversity

Land at Ferry Moor Lane, Barnsley
Reference: 82-523-R4
Date: February 25

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QUALITY ASSURANCE

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1. INTRODUCTION

1.1. BACKGROUND

E3P has been instructed by Oakland Golf and Leisure (UK) Ltd to produce a Construction Ecological Management Plan (CEMP): Biodiversity for the proposed development situated at Land at Ferry Moor Lane, Barnsley, hereafter referred to as 'the site'.

This report has been prepared by Huw Morgan BSc (Hons) MIEnvSc MCIEEM, CEnv, Principal Ecologist at E3P, who has over eight years professional experience as an ecological consultant. Huw has experience undertaking management plans for a wide variety of projects across the UK.

1.2. DISCHARGE CONDITION

The report has been prepared to discharge Condition 4 of the planning application 2023/0964 as follows:

> *4. Notwithstanding the submitted details, no development shall take place (including demolition, ground works and vegetation clearance) until a Construction Environmental Management Plan - Biodiversity (CEMP-B) has been submitted to and approved in writing by the local planning authority. The CEMP-B shall include, but not necessarily be limited to, the following:*
>
> - *Risk assessment of potentially damaging construction activities;*
> - *Identification of 'biodiversity protection zones;*
> - *An invasive non-native species protocol to ensure any invasive species are not spread in the wild;*
> - *Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements);*
> - *The location and timing of sensitive works to avoid harm to biodiversity features (e.g. daylight working hours only starting one hour after sunrise and ceasing one hour before sunset);*
> - *Use of protective fences, exclusion barriers and warning signs, including advanced installation and maintenance during the construction period;*
> - *The times during construction when specialists ecologists need to be present on site to oversee works;*
> - *Responsible persons and lines of communication;*
> - *The role and responsibilities on site of an Ecological Clerk of Works (ECoW) or similarly competent person(s).*
>
> *Reason: In accordance with Local Plan Policy BIO1.*

1.3. PROPOSED DEVELOPMENT

The development proposals include the importation of material to level off and further remediate the site to create a suitable open green space.

1.4. SITE LOCATION

The site is located between Cudworth and Grimethorpe approximately 1.6 km east of Barnsley, within a predominantly residential area. Access to the site is off of A6195 to Ferry Moor Lane which is located within the site boundary. To the north, south, and west features agricultural land and green open space with residential housing associated with Cudworth located beyond. Industrial buildings are located to the east of the site with further residential housing associated with Grimethorpe located beyond. Grimethorpe Nature Reserve is located approximately 915 m south-east of the site. Please refer to **Figure 1** for the approximate site location.

Figure 1 Approximate Site Location

1.5. PREVIOUS SURVEYS

PRELIMINARY ECOLOGICAL APPRAISAL, 2022

Environmental Business Solutions (EBS) undertook a Preliminary Ecological Appraisal (PEA) on-site in August 2022 (Report reference: Grim/0922/PEAR Preliminary Ecological Appraisal). During the PEA, the site was found to comprise semi-improved grassland, areas of broadleaved woodland, scrub, tall ruderal, young trees and seven waterbodies, which were all dry at the time of the survey. The site was also assessed as being able to support nesting birds, foraging bats, badger (*Meles meles*), reptiles, and common amphibians in the ponds on site and within 250 m of the site boundary.

GREAT CRESTED NEWT PRESENCE SURVEYS, 2023

EBS undertook Great Crested Newt Presence Surveys (EBS, 2023) between March and June 2023 on nine ponds within the site and within 250 m of the site boundary. Four ponds were found to be dry during the surveys (P6, P7, P8 and P9) whilst the remaining ponds were subject to surveys. No great crested newts *(Triturus cristatus)* were recorded within any of the ponds during the surveys and were determined to be absent from site. Common frog (*Rana temporaria*) were recorded within the ponds during each survey.

BREEDING BIRD SURVEYS, 2024

E3P undertook four Breeding Bird Surveys between April and May 2024 (Report reference: 81-523-R2). During the surveys, a total of 61 bird species were recorded on-site, including 35 Birds of Conservation Concern (BoCC) with ten red-listed species and 23 amber-listed species. Two Schedule 1 green-listed species were also recorded within the site. Of these notable species, 16 were considered to be breeding (confirmed, probable or possible) within the site.

ECOLOGY LETTER STATEMENT, 2024

E3P undertook an Ecological Walkover of the site in July 2024 (Report reference: 81-523-L1) in order to assess the site for its suitability to support water vole (*Arvicola amphibius*) and whether Open Mosaic Habitat (OMH) was present on site. During the walkover, the three ditches (D1, D2 and D3) previously identified during the Biodiversity Net Gain Assessment were assessed. D1 was dry during the breeding bird surveys between April and May 2024 and was determined as unsuitable for water vole, due to it only holding water during periods of heavy rainfall. D2 held shallow water, with large dry sections and no aquatic vegetation present. As such it was not considered suitable for water vole. D3 contained no aquatic vegetation and did not appear to have contained water for a long period of time as such was also considered unsuitable for water vole.

In addition, the habitats on site did not meet all the required criteria to be classified as OMH, and as such OMH was not considered to be present on-site.

BIODIVERSITY NET GAIN ASSESSMENT, 2024

E3P undertook a Biodiversity Net Gain assessment of the site in October 2024 (Report reference: 81-523-R1). In addition to the habitats identified during the previous PEA, three established waterbodies were identified in the centre of the site, and three ditches were identified around the western, northern and eastern site boundaries. The Biodiversity Metric 4.0 was used to calculate the baseline habitat units on-site. Habitat creation was then measured from the latest plans by Weller Designs Limited (2024) (Drawing reference: 901.07 Revision E). The results of the metric showed a gain of 7.78 habitat units (7.91%) and a gain of 2.15 watercourse units (65.36%). The trading rules of the metric were not satisfied as habitats lost have not been ‘traded up’.

2. AIMS AND OBJECTIVES

The Construction Ecological Management Plan (CEMP): Biodiversity sets out how protected/notable fauna and habitats will be protected and managed appropriately during the operational phase of development regarding ecology. The plan is to be followed by all contractors on-site.

The plan covers the following points:

- Demonstrating the responsible persons and lines of communication, as detailed in Section 3.
- Demonstrating the role and responsibilities on-site of an Ecological Clerk of Works (ECoW), and detail when the EcoW is required to oversee specific works as part of the remediation phase.
- Demonstrate the potential impacts on protected/notable fauna and habitats, in relation to the proposed remediation activities.
- The location and timing of sensitive works to avoid harm to biodiversity features.
- Detail protected areas/buffer zones for notable fauna and tree root protection areas.

3. RESPONSIBILITIES

3.1. ECOLOGICAL CLERK OF WORKS

All pre-commencement and operative works will be supervised by a suitably qualified ecologist, where it is deemed necessary, and they are to act as the ECoW. The ECoW role comprises:

- Provide Toolbox Talks for site operatives to inform them of legal responsibilities on-site.
- Inform site operatives of any Precautionary Working Methods to be adhered to and supervise these where required.
- Undertake general monitoring of site works to ensure all works are being undertaken in accordance with this report.
- Detail protected areas/ buffer zones for notable fauna.

3.2. SITE RESPONSIBILITIES

All operations on-site will be the overarching responsibility of the site manager. The project ecologist will work closely with the site manager to ensure that all site staff are appropriately inducted to the site and are aware of their legal responsibilities regarding wildlife legislation. Updates regarding ecology are to be completed by the project ecologist and site manager every quarter year during the remediation works.

The project ecologist will ensure that the site manager is aware of all working methods relevant to each phase of work. It will be the site manager's responsibility to ensure all site contractors are aware and competent to undertake these works.

The ECoW will supervise works where necessary. Any issues will be reported immediately to the project ecologist and where necessary works may be paused to explore alternative methods.

4. PRECAUTIONARY WORKING METHODS

The Work Schedule Table located in Appendix I details the locations and timings of sensitive works to avoid harm to biodiversity features on and adjacent to the site.

4.1. HABITATS

4.1.1. POLLUTION CONTROL MEASURES

Pollution control measures will be followed during the full remediation phase to minimise pollution incidents, which may indirectly affect terrestrial, or offsite aquatic habitats and associated protected/notable fauna, such as the waterbodies and woodland habitats located north of the site. Measures will be taken throughout the remediation phase to avoid dust pollution of Dearne Valley Wetlands Site of Special Scientific Interest (SSSI) located across two areas approximately 920 m south and 1.6 km west of the site. Pollution prevention and control strategies will be adhered to at all times.

Best practice protection measures will be put in place to reduce pollution. The following control measures will be required during any ground works and during the remediation phase to ensure there are no impacts on the waterbodies and water table or any wildlife utilising it:

- All operational plant will be kept well-maintained and will not enter/be stored within or directly adjacent to the retained habitats.
- Turning off plant when not in use.
- Dampening of the operational areas will be regularly undertaken during dry weather conditions to avoid dust. Dust management will be extended to cover the plant and all operational areas and will be complied with throughout the period of development.
- Measures to prevent pollutants from entering ground and surface water is standard construction practice through the use of a bunded fuel storage and refuelling area at a discrete distance from the on-site waterbodies and off-site watercourse. These measures will be underwritten by spill management equipment being kept on site and capable of being effectively utilised by trained operatives to contain any accidental spillage within any part of the operational area.
- A ‘Site Tidy’ protocol is to be put in place on site. All litter is to be appropriately controlled, whilst on-site materials are to be adequately stored overnight.

Any dust incidents within proximity to the site and/or adjacent habitats will be reported to the site manager and the EcoW. Dust control measures will include the following:

- Where possible use a vacuum rather than a sweeping brush.
- Select the appropriate / best practice means of extraction/suppression.
- If anyone is asked to carry out dust-generating activities without suppression measures the site team will be consulted for advice.
- Dust-generating tasks will never be carried out without the required control measures in place.
- Sealing and sheeting of stockpiles.
- Sheeting of vehicles transporting materials to and from the site.

- Limiting the speed of site vehicles within the site to 10 mph to reduce dust trails.
- Surfacing, where practicable, of the site haul roads.
- Haul roads will be located away from wetland habitat and other ecologically important habitats.
- Damping down using hoses and mobile bowsers.
- Carrying out visual monitoring at sensitive locations.
- Regular servicing of plant and equipment including cleaning/replacement of air filters.
- Issue of COSHH reports to identify any substances likely to cause offensive odours.
- Issue of Risk Assessment and Method Statements (RAMS) setting out how effective control measures will prevent the release of odours.

Please refer to Appendix II for the map of the site detailing the Biodiversity Protection Zones.

4.1.2. BROADLEAVED WOODLAND

The majority of vegetation on site will be removed to facilitate the remediation works, however, a small area of broadleaved woodland will be retained along the western site boundary.

The area of woodland along the western site boundary which is being retained will be appropriately protected during the remediation phase. Temporary protective demarcation fencing will be used to protect the woodland. The fencing must extend outside the canopy of the retained woodland and must remain in position works have been completed to ensure protection is provided throughout the remediation works.

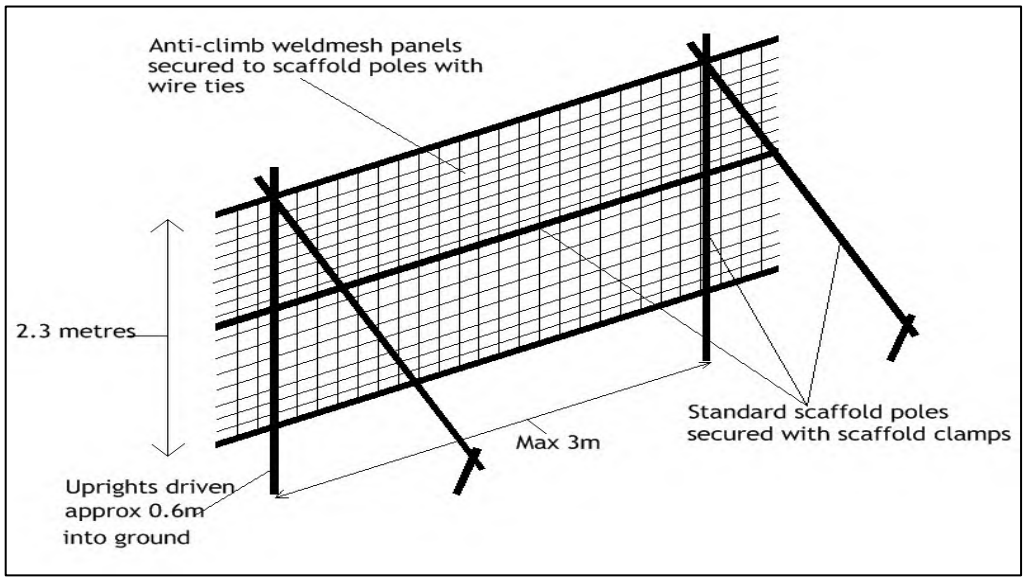
The fencing will be in accordance with BS5837:2012 Trees in Relation to Design, Demolition and Construction: Recommendations. Please refer to Appendix II for the location of the fencing.

Tree protection fencing will consist of a vertical scaffold framework, well-braced to resist impacts. The vertical poles must be spaced at a maximum interval of 3 m and driven securely into the ground. Onto this framework, welded mesh panels will be fixed (see **Figure 2**).

Laminated waterproof A3 signs will be fixed securely to fencing panels on each enclosure at 9 m intervals. The signs must clearly read: 'Protected Tree Zone, no storage or operations within fenced-off areas'.

Once the remediation works have been completed, the tree protection fencing may be removed. This must be done with care to ensure that no damage to trees is caused. Please refer to **Figure 2** for details of the tree protection fencing specification.

Figure 2 Tree Protection Fencing Specification



4.2. REASONABLE AVOIDANCE MEASURES

4.2.1. COMMON AMPHIBIANS

The habitats on site were found to be suitable for supporting common amphibians in their breeding and terrestrial phase due to the presence of waterbodies, scattered scrub, tall ruderal, dense scrub, broadleaved woodland and semi-improved grassland. Surveys were undertaken for great crested newts, and they were found to be absent from the site.

As such, the following Precautionary Working Methods will be adhered to during all phases of work in relation to common amphibians:

- All site contractors are to be briefed with a Toolbox Talk as to the potential presence of common amphibians, their legal responsibilities and working limits, by a suitably qualified experienced ecologist.
- The ECoW will search the site's vegetation prior to clearance to ground level, where required.
- The waterbodies on-site will be drained down in the presence of the ECoW with the use of a sump and filter and regular hand-searching will be undertaken to check for the presence of common amphibians.
- If refugia piles require removal, these will be cleared by hand where possible and to not jeopardise contractor health and safety.
- During works, the site will be kept tidy of debris and material, and any vegetation within the site will be maintained below 50 mm in height to discourage amphibians from re-entering these areas.
- All excavations will be excavated individually and back filled immediately after, where possible. Where this is not possible, excavations will be covered to prevent common amphibians becoming trapped within the excavation. If this is not possible, one or both sides of the excavation will be sloped in order to allow egress from the excavation, or a suitable ramp

provided to allow animals to escape. Any excavations must be checked regularly by site staff for trapped animals.

- During all phases of work including vegetation clearance and draining down of the waterbodies, any common amphibians encountered will be moved carefully by hand, away from construction activities and relocated to the retained woodland habitat or to habitat associated with the waterbodies to the north of the site.

4.2.2. BREEDING BIRDS

The majority of habitats on-site including the dense scrub, scattered scrub, broadleaved woodland, waterbodies and semi-improved grassland were found to provide suitable foraging and nesting habitat for a range of bird species, as recorded during the Breeding Bird Surveys undertaken by E3P (Report reference: 81-523-R2).

Areas of vegetation will require removal to facilitate the remediation works. Any vegetation removal is to be completed outside of the breeding bird season which is defined as March to September (inclusive). If this is not possible, the vegetation will be subject to a nesting bird check by the ECoW, within 48 hours of work commencing. If a nest (or nest in construction) is found, a suitable stand-off area will be maintained. The suitable stand-off will be decided by the ECoW and will be designated as a temporary 'Biodiversity Protection Zone' until the young have fledged. Appropriate fencing and signage will be used to protect the identified nesting birds, should it be required.

4.2.3. BADGER

The habitats on site were considered to be suitable to support commuting, foraging and sheltering badgers.

Badgers are highly mobile and can create new setts in a short period of time. If an on-site sett is identified and a suitable buffer cannot be maintained, the sett may require closure to facilitate the development. if a sett requires closure, a Natural England Badger licence will be required to close an active sett. Badger licences can only be obtained between July and November (inclusive) each year to avoid potential impact on pregnant females.

The following Precautionary Working Methods will be adhered to during the remediation works to ensure that no badgers within the local area are impacted by the proposed works:

- A pre-commencement badger walkover will be undertaken to determine if any new setts have been created within or adjacent to the site.
- All site operatives will be inducted on the presence of the species and taught how to recognise signs of badger and badger setts. They are to report suspected signs of badger/ badger digging to the ECoW.
- Should any badger sett entrance be uncovered during works, a 30 m buffer will be marked around the sett until the project ecologist has been consulted.
- Any excavations are to be backfilled each night, battened at a 45-degree angle or a suitable ramp installed; to facilitate escape should a badger enter the excavation.
- All tools and machinery are to be appropriately stored within the site compound where practicable, to avoid injuring terrestrial mammals.
- No works are to be undertaken after dark, and floodlights are not to be used throughout nighttime hours.

- All site machinery and materials will be appropriately stored to avoid harm to the species, notably between July and November each year when extra care is needed to avoid potential impacts on pregnant females.

4.2.4. HEDGEHOG

There is the potential for hedgehogs to be present within the site, specifically within the dense scrub, scattered scrub, tall ruderal, woodland and neutral grassland. The majority of these habitats will be removed as a result of the remediation works.

The following Precautionary Working Methods will be adhered to during the vegetation removal:

- Before commencing any work on-site, all contractors working on the site will be briefed with a Toolbox Talk by a qualified ecologist, to make them aware of the possible presence of hedgehogs, their legal protections and working practices to avoid harming them.
- No vegetation is to be cleared unless under the supervision and/or approval of an Ecological Clerk of Works (EcoW). Areas of neutral grassland, scattered scrub and dense scrub will be strimmed to 500 mm and then checked for hedgehogs by the ECoW. Once deemed clear of hedgehogs, the vegetation will be immediately cleared to ground level.
- If refugia piles require removal, these should be cleared by hand where possible and to not jeopardise contractor health and safety.
- If any hedgehogs are found, they will be carefully translocated to a suitable off-site area which will be unaffected by work. If a hedgehog nest is found, work will cease in the immediate area surrounding the nest until the hedgehogs have moved. Avoid touching any young as this may cause the hedgehog to kill or abandon the hoglets.
- During site clearance, the ECoW will advise where hand tools are required to ensure no sheltering small mammals are impacted by the works. Vegetation and debris piles will also be removed off-site to ensure no hedgehogs can refuge on-site post-site clearance.
- During the works, any excavations will be battered to 45 degrees to allow animals to escape should they become entrapped. Alternatively, the excavations will be covered overnight, or a ramp will be installed.
- Any temporarily exposed open pipe system will be capped in such a way as to prevent hedgehogs from gaining access, as this may happen when contractors are off-site.
- Construction items will be kept on pallets or similar to discourage hedgehogs from using the work areas.

4.2.5. REPTILES

The site was assessed as having value for reptiles within the semi-improved grassland, tall ruderal, scattered scrub, dense scrub and broadleaved woodland. Due to the majority of these habitats requiring removal, the following Precautionary Working Methods will be followed during all phases of work:

- All site contractors will be inducted by the ECow as to the potential presence of reptiles, their legal responsibilities and working limits.
- Any dense areas of vegetation to be removed will be strimmed to a length of approximately 150 mm under the supervision of the ECoW.

- During site works, all areas will be kepy tidy of debris and material, and any vegetation within the working areas will be maintained below 50 mm in height to discourage reptiles from re-entering these areas.

- If a reptile is identified, works will ceased and the project ecologist will be contacted immediately to capture the individual.

4.2.6. NEW ZEALAND PYGMYWEED

New Zealand pygmyweed (*Crassula helmsii*), an invasive plant species, was identified growing within the waterbodies on-site. The following Precautionary Working Methods will be followed to ensure the plant is dealt removed from site without spreading it further across the wider area:

- Prior to the draining of the waterbodies as detailed in Section 4.2.1, the New Zealand pygmyweed will be treated with an approved glyphosate formulation specifically designed for us in aquatic environments.

- Once the waterbody has been drained, further treatment with the approved glyphosate formulation will be applied to any submerged plants.

- The plant material will then be buried to a depth of at least 20 cm to ensure re-growth does not occur.

- All machinery, equipment and contractor's PPE will be routinely cleaned at all times, whilst the New Zealand pygmyweed is still present on-site to ensure further spread across the wider area does not occur.

5. COMPLIANCE REPORT

A site walkover will be undertaken immediately prior to any works on-site by a suitability qualified ecologist to ensure pre-commencement measures have been implemented. Details of the walkover and measures implemented will be inputted into a compliance report. Any measures yet to be implemented will be flagged to the site manager and will be instated immediately. An updated compliance check will then be required to confirm.

Approximately halfway through the remediation phase an updated walkover and assessment of the site will be undertaken to ensure the Precautionary Working Methods and measures detailed within this CEMP: Biodiversity are being followed. Any measures which are not being followed will be flagged to the site manager. Remedial action will be undertaken to address the measures, and a follow-up visit will be undertaken to ensure they have been implemented.

The final assessment of the site will be completed following the completion of the remediation works on-site. Following the completion of all walkovers, a compliance report will be produced detailing the conditions of the site as well as photographic evidence. The compliance report will then be submitted to the Local Planning Authority for approval.

6. REFERENCES

- E3P (2024). Biodiversity Net Gain Assessment – Land at Ferry Moor Lane, Barnsley. 81-523-R1
- E3P (2024). Breeding Bird Surveys - Land at Ferry Moor Lane, Barnsley. 81-523-R2.
- E3P (2024). Ecology Letter Statement - Land at Ferry Moor Lane, Barnsley. 81-523-L1.
- Environmental Business Solutions (2022). Preliminary Ecological Appraisal – Grimethorpe Colliery (Report reference: Grim/0922/PEAR Preliminary Ecological Appraisal).
- Environmental Business Solutions (2023). Great Crested Newt Presence Surveys – Grimethorpe Colliery.
- PPG5 Pollution Prevention Guidelines (2007).
- Wildlife and Countryside Act (2010) Schedule 9 of the Wildlife and Countryside Act 1981.

END OF REPORT

APPENDIX I
WORK SCHEDULE

WORK SCHEDULE

WORKS	METHODS	TIMING	ECOW REQUIRED?
TOOLBOX TALK	Toolbox talk to be completed by the ECoW in relation to protected species that may be present within the working area.	Any time of the year – completed when relevant.	Yes.
POLLUTION PREVENTION	Measures will be taken throughout the remediation phase to avoid pollution that may indirectly affect habitats and associated protected/notable fauna. Best practice protection measures as detailed within PPG5 Pollution Prevention Guidelines (2007) are to be followed. Dust control strategies will be adhered to at all times. Any accidental damage to the adjacent habitats will be reported to the site manager and the ECoW.	Throughout remediation phase.	Yes (when required).
INSTALLATION OF PROTECTIVE WOODLAND FENCING	Temporary protective demarcation fencing will be used to protect the retained woodland on site. The fencing will extend outside the canopy of the retained woodland and will remain in position until the work has been completed to ensure protection is provided throughout the remediation phase.	Throughout remediation phase.	Yes – to define zones with the site manager and to complete fencing checks (twice annually).
TREATMENT OF NEW ZEALAND PYGMYWEED WITHIN WATERBODIES	New Zealand pygmyweed will be treated with an approved glyphosate formulation specifically designed for use in aquatic environments prior to the draining of the waterbodies	January or February	No (works undertaken by a specialist invasive species contractor)
DRAINING DOWN OF WATERBODIES	The waterbodies on-site will be drained down in the presence of the ECoW with the use of a sump and filter and regular handsearching will be undertaken to check for the presence of common amphibians. Any common amphibians encountered will be moved carefully by hand, away from construction activities and relocated to the retained woodland habitat or to habitat associated with the waterbodies to the north of the site.	January or February	Yes
REMOVAL AND BURIAL OF NEW ZEALAND PYGMYWEED	Once the waterbodies have been drained, further treatment with the approved glyphosate formulation will be applied to any submerged plants.	Immediately after draining down of waterbodies	No (works undertaken by a specialist invasive species contractor)

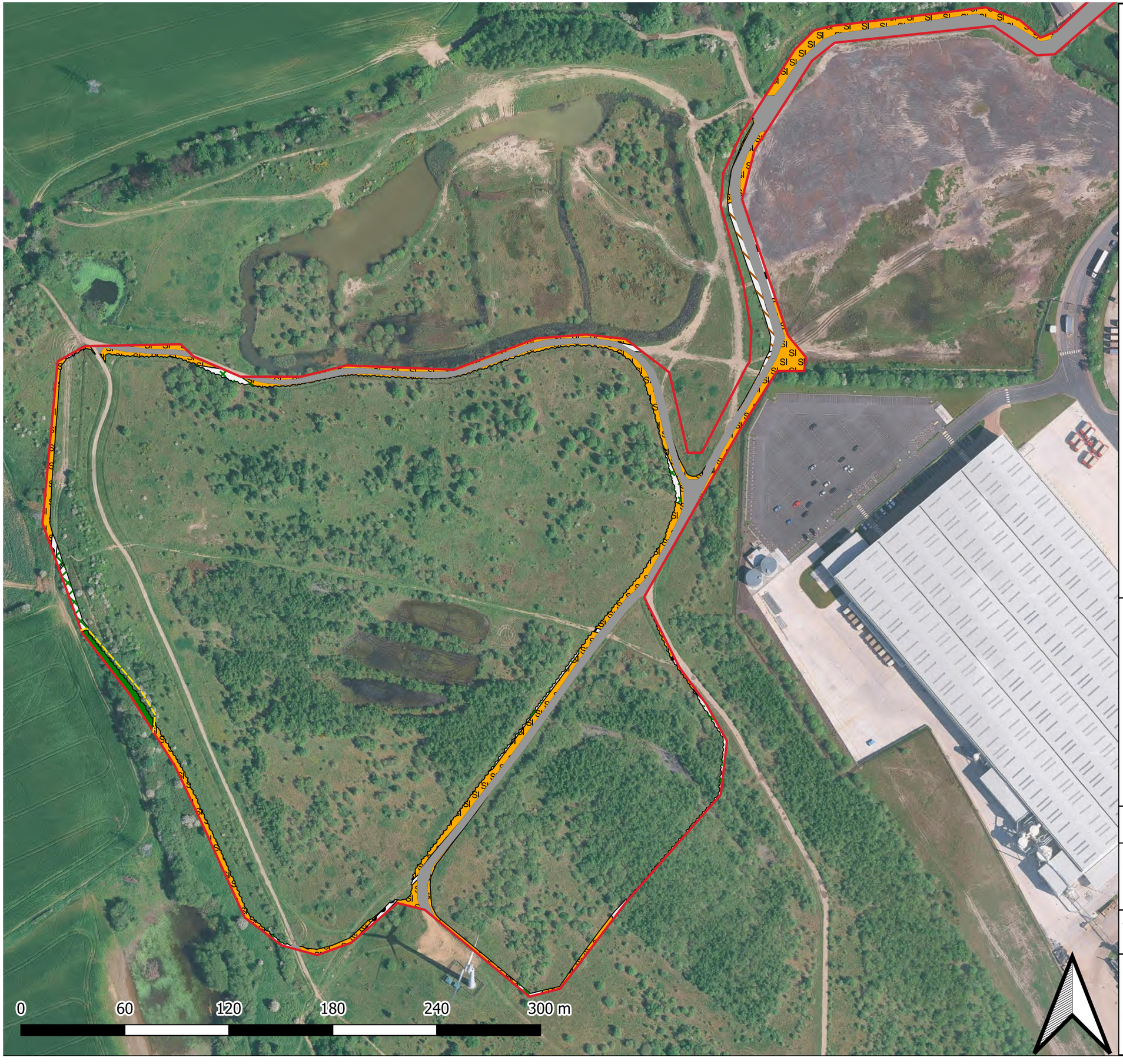
WORK SCHEDULE

WORKS	METHODS	TIMING	ECOW REQUIRED?
	The plant material will then be buried to at least a depth of 20 cm to ensure re-growth does not occur. All machinery, equipment and contractors PPE will be routinely cleaned at all times, whilst the New Zealand pygmyweed is still present on-site to ensure further spread across the wider area does not occur.		
COMMON AMPHIBIAN PRECAUTIONARY WORKING METHODS	All site contractors are to be briefed with a Toolbox Talk as to the potential presence of common amphibians, their legal responsibilities and working limits, by a suitably qualified experienced ecologist. The ECoW will search the site's vegetation prior to clearance to ground level, where required. If refugia piles require removal, these will be cleared by hand where possible so as to not jeopardise contractor health and safety. During works, the site will be kept tidy of debris and material, and any vegetation within the site will be maintained below 50 mm in height to discourage amphibians from re-entering these areas. All excavations will be excavated individually and back filled immediately after where possible. Where this is not possible, excavations will be covered to prevent common amphibians becoming trapped within the excavation. If this is not possible, one or both sides of the excavation will be sloped in order to allow egress from the excavation, or a suitable ramp provided to allow animals to escape. Any excavations must be checked regularly by site staff for trapped animals. Any common amphibians encountered will be moved carefully by hand, away from construction activities and relocated to the retained woodland habitat or to habitat associated with the waterbodies to the north of the site.	During vegetation clearance.	Yes.
BREEDING BIRDS PRECAUTIONARY WORKING METHODS	Vegetation removal is to be completed outside of the breeding bird season (March to September, inclusive). If this is not possible, the area will be subject to a nesting bird check by the ECoW, within 48 hours of work commencing. If a nest (or nest in construction) is found, a suitable stand-off	Within 48 hours of vegetation clearance from March to September (inclusive).	Yes (if during nesting bird season).

WORK SCHEDULE

WORKS	METHODS	TIMING	ECOW REQUIRED?
	area will be maintained. The suitable stand-off will be decided by the ECoW and will be designated as a temporary 'Biodiversity Protection Zone'.		
BADGER PRECAUTIONARY WORKING METHODS	Ongoing monitoring of badger activity during the remediation phase by contractors/site managers. PWMs are to be followed throughout the construction phase. If a badger sett is identified, a 30 m buffer is to be maintained and the ECoW is to be contacted immediately.	Throughout remediation phase.	Yes (when required).
HEDGEHOG PRECAUTIONARY WORKING METHODS	Removal of dense scrub, scattered scrub, grassland and woodland on-site will be undertaken under the supervision of a suitably qualified ecologist to ensure no hedgehogs are harmed during vegetation clearance. Works to these areas should avoid the hedgehog hibernation period (December to March, inclusive). Vegetation will be initially strimmed to 50 cm, checked for hedgehog by the ECoW, and then immediately cleared to ground level once deemed clear.	During vegetation clearance.	Yes.
REPTILES PRECAUTIONARY WORKING METHODS	All site contractors will be inducted by the ECoW as to the potential presence of reptiles, their legal responsibilities and working limits. Any dense areas of vegetation to be removed will be strimmed to be a length of approximately 150 mm under the supervision of the ECoW. During site works, all areas will be kept tidy of debris and material, and any vegetation within the working areas will be maintained below 50 mm in height to discourage reptiles from re-entering these areas. If a reptile is identified, works will cease and the project ecologist will be contacted immediately to capture the individual.	During vegetation clearance.	Yes

APPENDIX II
BIODIVERSITY PROTECTION ZONES



Key:

- Site boundary
- Tree Protection Fencing
- Retained hardstanding
- Retained scattered scrub
- Retained broadleaved woodland
- Retained tall ruderal
- Retained bare ground
- Retained semi-improved grassland
- Retained dense scrub

Notes

Issue:	Revision:	Date:	Drawn:	Authorised:
1	1	04/02/2025	CJ	CK

Client: Oakland Golf and Leisure (UK) Ltd	Job No. 81-523	Date: 04/02/2025
	Drawing No. 81-523-008	Scale: 1:3500 @ A3
Job title: Land at Ferry Moor Lane, Barnsley	Drawing title: Biodiversity Protection Zones Plan	

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APPENDIX III
TOOLBOX TALK

TOOLBOX TALK – AMPHIBIANS

WHAT?

- Amphibians are known to have low and declining numbers across the U.K. and Europe, as a result of habitat losses from development and intensive agriculture. The three groups include toads, frogs and newts with all groups containing native and non-native (several invasive) species.

- Amphibians are cold-blooded animals with an aquatic larval stage and terrestrial adult stage. Common amphibians that may be present on-site include frogs, toads and newts.

HOW YOU COULD BREAK THE LAW

- Several of the species are strictly protected which requires a licence to handle or disturb, this includes **great crested newts, natterjack toads** and **Northern pool frogs** – Which means that it is illegal to intentionally capture, kill, disturb or injure newts and to deliberately damage or destroy a breeding or resting place or obstruct access to their resting/sheltering places (deliberately or by not taking enough care). If found guilty, you could face an unlimited fine and up to 6 months in prison for each offence.

- The more common species are still afforded some protection this includes protection from sale and trade under the Wildlife and Countryside Act 1981. Also, several species are recognized as being a UK Biodiversity Action Plan priority species meaning there were identified as being the most threatened and requiring conservation action.

IDENTIFICATION

Common toad

- 5 – 9 cm with rough skin
- Brown to red colouration with areas of darker markings
- Small hops rather than large jumps like frogs
- Spawn laid in gelatinous clumps

Common frog

- 6 – 7 cm with smooth skin
- Variation in colouring from brown to yellow and orange
- Dark marking behind the eye known as a ‘mask’
- Spawn laid in gelatinous strings

Northern pool frog

- 6 – 7 cm with smooth skin
- Predominantly brown with dark brown or black blotches over the back with yellow dorsal stripes
- Inflatable pouches (vocal sacs) on either side of the mouth
- Spawn laid in gelatinous rafts – brown above with yellow underside

Other species include:

- Edible frog
- Marsh frog
- North American bullfrog
- **Natterjack toad**
- Midwife toad

Smooth newt

- Up to 10 cm
- Orange or yellow stomach stripe with rounded spots – males have a crest running head to tail tip
- Only found within waterbodies during breeding season mainly found around garden ponds

Palmate newt

- Up to 9 cm
- Darker colouration with pink throat with no pigmentation – males have a ridge running along their back with a filament on the tail
- Juveniles are completely terrestrial

Great crested newt

- 10 to 16 cm with rough skin
- They are predominantly black in colour, with orange markings on the underside – breeding males have a crest that has a break between the back and tail with a silvery-white strip towards the rear

Alpine newt

- 8 to 11 cm with females usually larger than males
- Orange underside without spots and females have a marbled pattern along their back

PRECAUTIONARY WORKING METHODS

It is recommended that works are undertaken under Precautionary Working Methods (PWMs) listed below:

- All contractors are to be inducted and informed of the potential presence of the species, their working limits and their legal responsibilities – **including which species are strictly protected and therefore if found to be present work would need to stop, and a licence will need to be applied for and separate RAMs and PWMs.**
- The site may support small numbers of common amphibians. It is recommended that during the clearance phase of works, any common amphibians encountered be moved by hand, away from construction activities. Do not move or disturb the amphibian unless there is an immediate risk to its safety. Replace the material that it was taking refuge under, being careful not to cause harm.
- Removal of vegetation and debris piles off-site to ensure no amphibians can take refuge post-site clearance.
- In the unlikely event that a great crested newt is encountered during the works, all works must cease and a suitability qualified ecologist should be contacted.

PLEASE SIGN BELOW TO INDICATE THAT YOU HAVE UNDERTAKEN AND UNDERSTAND THE TOOLBOX TALK PRESENT ABOVE.

NAME	DATE	SIGNED

TOOLBOX TALK - BADGER

WHAT?

- Badgers are large black and white mammals that are protected by law in the UK.
- Badgers and the setts they live in are protected under the Protection of Badgers Act 1992.

HOW YOU COULD BREAK THE LAW

In England and Wales, it is an offence to:

- Wilfully kill, injure or take a badger or attempt to do so
- Cruelly ill-treat a badger
- Dig for a badger
- Intentionally or recklessly damage or destroy a badger sett, or obstruct access to it
- Cause a dog to enter a badger sett
- Disturb a badger when it is occupying a sett

It is illegal to carry out any construction work within proximity of a badger sett without taking steps to positively avoid damage and without an appropriate licence. It is no excuse in law to be unaware of the presence of badgers.

IDENTIFICATION

Badger

Badger sett

Badger footprint

- Fully grown adults can be up to 1 m in length and weigh up to 14 kg.
- The sett entrance is usually D-shaped and at around 300 mm wide by 200 mm high is wider than either a fox or rabbit hole.

- There may be signs of freshly excavated material at the entrance or piles of leaves, dry grass, straw or bracken, which the badgers take inside to use as bedding.
- Badgers have a distinctive footprint – five claws and a broad main pad.

WHAT TO DO

- If at any time a badger sett is located, the site supervisor must be informed immediately and they must call an E3P ecologist, so the appropriate action can be taken.
- A 20 m buffer must be established around each outlier, annex or subsidiary sett entrance and a 30 m buffer around a main sett, no works are to be undertaken within this buffer.

PRECAUTIONARY WORKING METHODS

It is recommended that works are undertaken under the Precautionary Working Methods (PWMs) listed below:

- All works will be supervised by a suitably qualified Ecological Clerk of Works (ECoW).
- A Toolbox Talk will be given to all contractors on-site by the ECoW and will be signed. During the talk, all contractors will be briefed on how to identify badger setts and given the confidence to cease works and contact an ecologist if they believe any new setts have been located.
- No works will be undertaken within 20 m of an active outlier, subsidiary, or annex sett, or within 30 m of a main sett. No machinery will be tracked in these areas.
- Before undertaking works in proximity to field margins or woodland, the ECoW will complete a check of the hedgerow or woodland to ensure no new setts have been created, as new setts can be formed in a matter of days.
- There are thre badger setts in proximity to the site. There will be no flailing within 30 m of the main sett, or 20 m of the outlier setts.
- All site machinery and materials will be appropriately stored to avoid harm to the species.
- No works will be undertaken in proximity to the badger setts after dark, and no lighting will be directed at the badger setts.
- No dogs should be taken onto the site by any of the workforce.

PLEASE SIGN BELOW TO INDICATE THAT YOU HAVE UNDERTAKEN AND UNDERSTAND THE TOOLBOX TALK PRESENT ABOVE.

NAME	DATE	SIGNED

TOOLBOX TALK – HEDGEHOGS

WHAT?

- Hedgehog numbers have been declining across the UK as a result of habitat loss from development, habitat fragmentation, road casualties and injuries (e.g. from strimmers, netting and dogs).
- They are protected under Section 41 of the Natural Environment and Rural Communities Act 2006.

HOW YOU COULD BREAK THE LAW

- Hedgehogs are protected by British law under the Schedule 6 of the Wildlife and countryside Act 1981, making it illegal to kill or capture them. They are also protected in Britain under the Wild Mammals Protection Act (1996), prohibiting cruelty and mistreatment.
- It is illegal to intentionally or recklessly damage or destroy a hedgehog nest or obstruct access to it and it is illegal to disturb a hedgehog when it is occupying a nest.

IDENTIFICATION

WHAT TO DO

- If at any time a hedgehog is found, works must be paused immediately and a E3P ecologist should move it to a safe area, away from the works.
- Do not move or disturb a hedgehog on its nest unless there is an immediate risk to its safety. Carefully replace any material that the hedgehog was nesting under and avoid touching any hoglets.

PRECAUTIONARY WORKING METHODS

To avoid committing a criminal offence and to reduce the risk of killing or injuring hedgehogs the following measures should be enforced:

- Before commencing any work on site, all builders and contractors should be inducted to make them aware of the possible presence of hedgehogs, their legal protection and of working practices to avoid harming them;
- No works to ground are to be completed unless under the supervision of an Ecological Clerk of Works (ECoW);
- Removal of vegetation and debris piles off-site to ensure no hedgehogs can refuge post site clearance;
- Areas of scrub and tall grassland must be strimmed to 30 cm then checked for hedgehog by the ECoW. Once deemed clear of hedgehogs, the vegetation should be immediately cleared to ground level;
- The base of hedgerow, dense scrub, log piles and natural refugia should be hand checked by an ECoW prior to works;
- If a hedgehog found, they should be carefully translocated to a suitable off-site receptor area which will be unaffected by works;
- If a hedgehog nest is found, works must cease in the immediate area surrounding the nest until the hedgehogs have moved. Avoid touching any young as this may cause the hedgehog to kill or abandon the hoglets.

PLEASE SIGN BELOW TO INDICATE THAT YOU HAVE UNDERTAKEN AND UNDERSTAND THE TOOLBOX TALK PRESENT ABOVE.

NAME	DATE	SIGNED

TOOLBOX TALK - REPTILES

WHAT?

- Reptiles experiencing population decline, mainly due to habitat loss.
- These reptiles and their habitats are protected under UK and EU law.
- There are four common species of reptile in the UK, including common lizard, slow worm, grass snake and adder. The site has the potential value for common lizard within the broadleaved woodland and scrub.

HOW YOU COULD BREAK THE LAW

- It is illegal to intentionally kill, injure or trade (i.e. sale, barter, exchange, transporting for sale and advertising to sell or to buy) reptiles.

IDENTIFICATION

Grass snake

Slow worm

Common lizard

Sand lizard

WHAT TO DO

- If at any time a reptile is found, works must be stopped immediately and the site supervisor must call an E3P ecologist, so the appropriate action can be taken prior to works restarting.
- Do not more or disturb the reptile unless there is an immediate risk to its safety. Immediately replace material that the reptile was taking refuge under, being careful not to harm the reptile.

PRECAUTIONARY WORKING METHODS

It is recommended that works are undertaken under Precautionary Working Methods (PWMs) listed below:
All contractors are to be inducted and informed of the potential presence of the species and their legal responsibilities;

- Site clearance of large rubble and debris piles, are to be moved by machinery under the supervision of an Ecological Clerk of Works (ECoW) and checked for reptiles;
- Small rubble and debris piles are to be checked by hand and cleared by an ECoW,
- Strimming of any vegetation to a length of 150 mm under supervision by the ECoW to allow species dispersal;
- Following strimming, the area should be deemed clear of reptiles by the ECoW (through fingertip searching) and then turfed immediately;
- Removal of vegetation and debris piles off site to ensure no reptiles can refuge post site clearance;
- If any reptiles are found, they are to be removed from site by a qualified ecologist, offsite, to the tree line located to the north east of the site; and,
- No contractors are to handle reptiles, unless it appears to be in immediate danger

PLEASE SIGN BELOW TO INDICATE THAT YOU HAVE UNDERTAKEN AND UNDERSTAND THE TOOLBOX TALK PRESENT ABOVE.

NAME	DATE	SIGNED

TOOLBOX TALK – NESTING BIRDS

WHAT?

Proposed vegetation clearance works are to be carried out within the breeding bird season (March – September, inclusively). A nesting bird check is to be carried out by the appointed ecologist prior to removal of suitable nesting vegetation, within 48 hours of its removal.

HOW YOU COULD BREAK THE LAW

- It is illegal to intentionally kill, injure or take wild birds and to take, damage or destroy their nest, while it is being used or built, or to take/destroy their eggs. It is also illegal to possess, sell, control or transport live or dead wild birds, or parts of them or their eggs.
- If found guilty, you could face an unlimited fine and up to 6 months in prison for each offence.

IDENTIFICATION

WHAT TO DO

- If you are concerned that you have located a bird nest please seize works immediately and contact an E3P ecologist on 0161 707 9612, so the appropriate action can be taken prior to works restarting.
- Do not move or disturb the nest unless there is an immediate risk to its safety.

PRECAUTIONARY WORKING METHODS

To avoid committing a criminal offence and to reduce the risk of killing or injuring any birds or their nests. The following measures should be enforced:

- Before commencing any work on site, all builders and contractors should be inducted to make them aware of the possible presence of nesting birds, their legal protection and of working practices to avoid harming them.

- Should any nests, or nests in construction be located, a minimum of suitable stand-off distance will be maintained until the young have fledged. The stand-off distance will be informed by the ecologist. This area will be designated as a temporary'Biodiversity Protection Zone'.
- No clearance works to be carried out unless an ecologist is present.

PLEASE SIGN BELOW TO INDICATE THAT YOU HAVE UNDERTAKEN AND UNDERSTAND THE TOOLBOX TALK PRESENT ABOVE.

NAME	DATE	SIGNED

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