

Construction Ecological Management Plan

NW08, Horiba Mira

A Report To: Horiba Mira Ltd
Report Number: RT-MME-161054-01 Rev B
Date: October 2023



Quality Assurance

Date	Version	Author	Checked and Approved by
31/08/2023	Final	Hannah Train ACIEEM (Principal Consultant) and Asija Zeidaks (Ecological Consultant)	Helen Griffin ACIEEM (Principal Ecological Consultant)
04/10/2023	Rev A	Hannah Train ACIEEM (Principal Consultant) and Asija Zeidaks (Ecological Consultant)	Helen Griffin ACIEEM (Principal Ecological Consultant)
05/10/2023	Rev B	Hannah Train ACIEEM (Principal Consultant) and Asija Zeidaks (Ecological Consultant)	Helen Griffin ACIEEM (Principal Ecological Consultant)

Declaration of Compliance

This study has been undertaken in accordance with British Standard 42020:2013 "Biodiversity, Code of Practice for Planning and Development". The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

Disclaimer

The contents of this report are the responsibility of Middlemarch Environmental Ltd. It should be noted that, whilst every effort is made to meet the client's brief, no site investigation can ensure complete assessment or prediction of the natural environment.

Middlemarch Environmental Ltd accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

Contents

1. Introduction.....	4
1.1 Project Background	4
1.2 Site Description and Context.....	4
1.3 Summary of Proposals	5
2. Assessment of Impacts	6
2.1 Overview of Construction Activities and Impact Pathways	6
2.2 Summary of Potential Impacts in the Absence of Mitigation.....	6
3. General Control of Works.....	8
3.1 Ecological Management Team.....	8
3.2 Identification of Biodiversity Protection Zones	8
3.3 Quality Control.....	10
4. Avoidance and Mitigation	11
4.1 Use of Protective Fencing/Barriers	11
4.2 Site Compound and Storage of Materials	11
4.3 Pollution Prevention.....	11
4.4 Lighting	11
4.5 Noise and Vibration	12
4.6 Fire Prevention	12
4.7 Mitigation Measures for Notable Habitats	12
4.8 Mitigation Strategy for Protected and Notable Species	12
4.9 Timing Restrictions	15
4.10 Contingency Measures.....	15
5. Drawings.....	16
Appendix 1	19
Summary of Relevant Wildlife Legislation.....	19

1. Introduction

1.1 Project Background

In July 2023, Horiba Mira Ltd commissioned Middlemarch to produce a Construction Ecological Management Plan (CEcMP) associated with a proposed development in the north-west of the MIRA site located at Watling Street, Nuneaton.

Previous assessments of the NW08 plot were carried out by Middlemarch in 2016 and 2018 in association with previous proposals for the site and included both NW07 (which has now been developed) and NW08. Middlemarch completed an updated Ecological Walkover Survey (Report RT-MME-160215) of the NW08 plot in April 2023, which included an additional visit in June 2023 to provide a targeted botanical assessment. A Great Crested Newt Habitat Suitability Index Assessment and eDNA Survey of ponds in proximity to the plot was also completed in June 2023 (Report RT-MME-160692).

The overall aim of the CEMP is to minimise the potential impact of the construction phase of the development on the existing ecology of the site, and ensure works proceed in accordance with current wildlife legislation. It is designed specifically for implementation during the construction phase of the proposed development. This report contains the following information:

- Chapter 2: Assessment of Impacts
- Chapter 3: General Control of Works
- Chapter 4: Avoidance and Mitigation
- Chapter 5: Drawings.

1.2 Site Description and Context

Table 1.1 provides a brief summary of the site and its surroundings.

Attribute	Description
Location	Plot NW08, Horiba MIRA, Watling Street, Nuneaton
National Grid Reference	SP 3695 9661
Site Area (ha)	3.71
Topography	Flat
Land Cover (on site)	The site is dominated by semi-improved grassland, bounded by hedgerows to the west and north and dense scrub to the east. A pond and a SUDS feature are present along the eastern boundary.
Land Cover (site surrounds)	Built development associated with the wider MIRA complex immediately surrounds the NW08 plot, whilst the landscape beyond is dominated by a rural setting comprising mixed use agricultural land interspersed with small pockets of woodland and occasional residential dwellings.

Table 1.1: Summary of Site and Surroundings

1.3 Summary of Proposals

The plot will be developed in two phases. Phase 1 comprises the construction of a multi-use concrete pad to allow the erection of temporary event structures, with associated areas for servicing and parking, for which a full planning application has been submitted to Hinckley and Bosworth Borough Council (23/00789/FUL). Phase 2 plans have not been finalised, but works are likely to include the construction of further multi-use concrete pads for future use.

A great crested newt mitigation licence application is being made for this site which will include a trapping and translocation exercise (see Section 4.8). This exercise will be completed for both phases simultaneously in order to avoid the double handling of newts. Therefore, for the purposes of assessment, both phase 1 and phase 2 are included within this document. Documentation made available by the client is listed in Table 1.2.

Document / Drawing Number	Author
Proposed Block Plan / 7045-XX-NW08-XX-XX-X-04	BCAL Consulting
Site Location Plan / 7045-XX-NW08-XX-DR-X-02	BCAL Consulting
NW8 Ph2 – Phase 2 Initial Option / 7045-SK-2023-07-24 Rev P1	BCAL Consulting

Table 1.2: Documentation Provided by Client

2. Assessment of Impacts

2.1 Overview of Construction Activities and Impact Pathways

The following activities are likely to be required during the works:

- Use of site by construction vehicles;
- Use of site by personnel;
- Use of machinery;
- Vegetation clearance and groundworks;
- Laying of concrete pads;
- Use of lighting for work compounds; and,
- Storage of materials on site.

In the absence of mitigation, these activities have the potential to adversely affect ecological features via the following impact pathways:

- Direct loss or damage to habitats scheduled for retention, in the event that areas outside the construction zone are accessed by vehicles, machinery or people;
- Increased noise and/or visual disturbance from vehicles, people, machinery and lighting;
- Air, ground and water pollution on and adjacent to the site due to emissions from vehicles and machinery;
- Release of dust from machinery and stored materials; and
- Killing, injury or disturbance to fauna during vegetation clearance and groundworks.

2.2 Summary of Potential Impacts in the Absence of Mitigation

Table 2.1 details the key ecological features identified during baseline surveys (refer to Section 1.1) and assesses the potential for adverse impacts in the absence of mitigation or control measures. Legislation relevant to the ecological features identified is provided in Appendix 1.

Ecological Feature	Source to inform baseline	Assessment of Potential Impacts
Non-statutory designated sites		
MIRA Boundary Hedge 1 Potential Local Wildlife Site (pLWS)	Preliminary Ecological Appraisal - High Speed Limit Handling Facility (Report RT-MME-126785-01, 2018)	This pLWS is located adjacent to the NW08 plot and could be subject to habitat loss or damage due to encroachment of construction vehicles and machinery outside of works footprint and into Root Protection Areas.
Habitats		
Hedgerows and associated trees (to be retained)	Ecological Walkover (Report RT-MME-160215, 2023)	Hedgerows delineate the western, northern and eastern boundaries of the plot and all will be retained. These retained hedgerows could be subject to habitat loss or damage due to encroachment of construction vehicles and machinery outside of the works footprint and into Root Protection Areas.

Table 2.1: Summary of Potential Impacts on Ecological Features (continues)

Ecological Feature	Source to inform baseline	Assessment of Potential Impacts
Habitats		
Pond P8 and SUDS feature	Ecological Walkover (Report RT-MME-160215, 2023)	One pond (referred to previously as P8) and a SUDS feature (SUDS 1) created as part of previous developments are present along the eastern boundary of the development site. These features could be subject to damage due to pollution.
Dense scrub, marshy grassland, semi-improved grassland, tall ruderal	Ecological Walkover (Report RT-MME-160215, 2023)	There will be a partial loss of these habitats to accommodate the development. Where retained, there is the potential for these habitats to be damaged due to pollution, or encroachment from machinery.
Bats	Ecological Walkover (Report RT-MME-160215, 2023)	Minor loss of suitable foraging and commuting habitat; fragmentation of habitat due to lighting; disturbance due to noise and vibration in proximity to roosts. Breach of wildlife legislation.
Terrestrial mammals (badger and brown hare)	Ecological Walkover (Report RT-MME-160215, 2023)	Damage or destruction of a badger sett (none identified on site or within immediately surrounding area during surveys completed to date, but site supports suitable sett-building habitat), minor loss of foraging and refuge habitat; killing or injury during vegetation clearance and groundworks; fragmentation of habitat due to lighting; disturbance due to noise and vibration. Breach of wildlife legislation.
Amphibians, including great crested newts	Great Crested Newt Habitat Suitability Index Assessment & eDNA Survey (Report RT-MME-160692, 2023)	Minor loss of immediate (<50 m from ponds) and intermediate (>50 m and <250 m from ponds) terrestrial habitat; temporary disturbance of retained terrestrial habitat; killing or injury during vegetation clearance and groundworks. Breach of wildlife legislation.
Reptiles	Ecological Walkover (Report RT-MME-160215, 2023)	Minor loss of suitable commuting and refuge habitat; killing or injury during vegetation clearance and groundworks. Breach of wildlife legislation.
Birds	Ecological Walkover (Report RT-MME-160215, 2023)	Minor loss of nesting and foraging habitat; killing or injury during vegetation clearance. Breach of wildlife legislation.

Table 2.1 (continued): Summary of Potential Impacts on Ecological Features

Control measures to prevent and manage potentially adverse impacts on ecological features during the construction phases of the development are provided in Chapters 3 and 4.

3. General Control of Works

This section of the report provides information with respect to the methods that will be implemented during the construction phase, in order to ensure the protection of ecologically sensitive habitats within the site and to prevent significant adverse impacts on any protected/notable species present.

3.1 Ecological Management Team

The overall responsibility for ensuring construction works proceed in accordance with the CEcMP will lie with Horiba MIRA Ltd.

Horiba MIRA Ltd will appoint an Ecological Manager. The responsibilities of the Ecological Manager will include developing method statements and site protocols as required, providing guidance for the site team in dealing with environmental matters, and liaising with contractors/sub-contractors and any statutory or third party with an ecological interest in the scheme. The Ecological Manager will ensure that all site personnel are appropriately briefed on the ecological issues within the site. This will be undertaken through inclusion of ecological briefings within the 'toolbox' talks given to all staff as part of the site induction process.

A suitably qualified Ecological Clerk of Works will be appointed by Horiba MIRA Ltd to advise and oversee construction activities where appropriate and ensure the site team and sub-contractors comply with site protocols and control/mitigation measures. Any failings will be reported to the Project Manager immediately, who will be responsible for ensuring that remedial action is implemented.

The Ecological Clerk of Works will be responsible to the Ecological Manager and will approve all method statements, in addition to ensuring that any relevant site ecological protocols are appended and that these controls are adhered to.

The ecological management team for this project is summarised in Table 3.1.

Role	Persons Responsible
Project Manager / Site Manager	Horiba MIRA Ltd
Ecological Manager	Middlemarch
Ecological Clerk of Works	Middlemarch

Table 3.1: Ecological Management Team

3.2 Identification of Biodiversity Protection Zones

In order to categorise the site according to ecological risk and to identify areas where certain construction activities are prohibited or restricted, a traffic light system will be implemented. The site has been divided into Red, Amber and Green Zones, with Red Zones being those areas of highest biodiversity interest and of greatest risk from construction.

The areas of the site falling into each of the Biodiversity Protection Zones are detailed below and are shown on Drawing C161054-01-02 in Chapter 5.

Red Zones / Features

Red Zones are defined as the most ecologically sensitive parts of the development site, or the areas most vulnerable to ecological damage. The following features on site are included in this category:

- The hedgerows which delineate the western, northern and eastern boundaries and associated trees scheduled for retention, including trees which have the potential to support roosting bats;
- The pond (P8) and SUDS feature (SUDS 1) to be retained, which support great crested newts;
- The dense scrub, marshy grassland and semi-improved grassland surrounding the pond and SUDS feature in addition to a portion of scrub which extends from the hedgerows at the north-western corner of the plot.

Red Zones are the areas that will be retained and protected throughout the development, and works will be subject to ongoing monitoring by the Ecological Clerk of the Works. No works can be undertaken within the Red Zones without prior consent from the Ecological Manager. Measures that will be implemented to ensure that Red Zones are protected are summarised in Chapter 4.

Amber Zones / Features

Amber Zones are defined as areas of moderate to high ecological value that may be subject to direct or indirect impacts as a result of the proposed development. The following features on site are included in this category:

- Habitats to be lost, including semi-improved grassland, dense scrub and tall ruderal vegetation.

Any works impacting upon Amber Zones will be subject to control measures (see Chapter 4) and will be undertaken under the supervision or guidance of the Ecological Clerk of Works. Once works within the Amber Zones have been completed, the Ecological Clerk of Works may downgrade these areas to Green Zones.

All works within Amber Zones will proceed with caution and will be subject to regular monitoring by the Ecological Clerk of Works. Specific mitigation and control proposals that will be implemented to minimise the ecological impact of work in Amber Zones are detailed in Chapter 4.

Green Zones / Features

Green Zones are areas identified as having low ecological interest where breaches of wildlife legislation are unlikely to occur. They are of low intrinsic value, and do not offer any key habitat for notable or protected species.

Works within Green Zones are permitted to proceed without supervision by the Ecological Clerk of Works, provided that ecological best practice is adhered to at all times. Should any ecological issues be identified, works will cease and the Ecological Clerk of Works will be contacted for advice.

3.3 Quality Control

Site Inductions / Toolbox Talks

All personnel on site will receive a site induction prior to commencing any work activities. The site induction will highlight key issues, operations, times of year and areas in relation to ecology. The induction will include:

- Awareness of the Biodiversity Protection Zones Map (see Drawing C161054-01-02 in Chapter 5);
- Site activity method statements;
- Reporting hierarchy; and,
- Permit system.

Ecological Permits

Ecological Permits will be required for working in Red or Amber Zones. These will be valid for specific time periods and will be renewed at least once a month.

Ecological Certificates

Once an activity has been completed or work in a designated area is finished, a certificate will be signed by the Ecological Manager to confirm it has been carried out to an acceptable standard.

Rectification Notices

Rectification notices will be issued by the Ecological Clerk of Works to the Site Manager or a representative of the site team for implementation of action required. These will be signed on completion by the site manager, or a representative of the site team and counter signed by the Ecological Manager or Clerk of Works.

Daily Record Sheets

The Ecological Clerk of Works will record activities and observations onto a record sheet during visits to the site.

Progress Report

The Ecological Manager will produce a monthly report based on the record sheets, highlighting any issues raised during the programme. The report will include copies of:

- Ecological Permits;
- Ecological Certificates; and,
- Rectification Notices.

Examples of permits, certificates and notices can be provided from Middelmarsh upon request.

Revisions to Scheme

Should the need to amend any details of the scheme arise, such as the proposed methods of working or the extent of the works, the proposed changes will be approved in writing by the Ecological Clerk of Works prior to implementation, and also by the Local Planning Authority if required.

4. Avoidance and Mitigation

4.1 Use of Protective Fencing/Barriers

The hedgerows, trees and dense scrub scheduled for retention will be protected during the works by the installation of protective fencing. This fencing should ensure the integrity of the Root Protection Area of the trees, and should meet the requirements of British Standard 5837: 2012 "Trees in relation to design, demolition and construction – recommendations".

All fencing and barriers should be installed section by section prior to the commencement of works in that section, and under the supervision of the Ecological Clerk of Works where required. The fencing will be temporary, but sufficiently robust to prevent accidental incursions into the protected areas.

4.2 Site Compound and Storage of Materials

All areas to be used for site compounds / material storage will be agreed with the Ecological Clerk of Works and will be within habitats of negligible ecological value. No storage of materials will be permitted in close proximity to the retained hedgerows or ponds.

4.3 Pollution Prevention

Environment Agency Pollution Prevention Guidelines were formerly withdrawn in December 2015, although do provide a useful framework for the design of working practices. Guidance on Pollution Prevention for Businesses is provided at <https://www.gov.uk/guidance/pollution-prevention-for-businesses>. These guidelines include details for the design of working practices to avoid pollution during construction and will be followed throughout the construction period.

No bulk storage of fuel and other liquids will be permitted on site. Fuels and other liquids which must be stored on site will be kept in bunded containers within habitats of negligible value. Spill kits will be available on site and procedures will be in place to deal with any incidents efficiently and quickly.

Refuelling of plant/machinery on site will be avoided. If refuelling is required, then it will be undertaken as far away from notable habitats as possible, over a drip tray.

Appropriate dust suppression measures will be put in place to reduce impacts to habitats and species outside of the works area. The 'Construction Dust Information Sheet' issued by the Health and Safety Executive (2020¹) provides guidance on controlling construction dust and will be followed throughout the construction period.

4.4 Lighting

It is not anticipated that working at night would be necessary. However, if any security lighting or lighting at night is required, then it will be low level and directional, ensuring that there is no increase in illumination of key ecological features.

¹ Health and Safety Executive (2020) *Construction Dust – Construction Information Sheet No 36 (Revision 3)*. March 2020.

4.5 Noise and Vibration

Reasonable measures will be taken to avoid significant increases in noise and vibration during the construction phase of the development. Any construction works on site will be carried out in accordance with British Standard 5228:2009 Code of Practice for Noise and Vibration Control on Construction and Open Sites².

Engines of construction vehicles will be turned off when these vehicles are stationary to minimise noise and vibration disturbance.

4.6 Fire Prevention

During construction, fires will not be permitted on the site and the work force will be made aware of the risks of accidental fires on surrounding retained habitats.

4.7 Mitigation Measures for Notable Habitats

The retained hedgerows, trees and dense scrub will be protected according to the measures outlined in Section 4.1.

Retained ponds will be protected according to the measures outlined in Sections 4.2 and 4.3

4.8 Mitigation Strategy for Protected and Notable Species

Bats

Roosting Bats

The Ecological Walkover (Report RT-MME-160215, 2023) completed at the site in April 2023 identified that trees associated with the hedgerow along the eastern boundary of the site are of a suitable size and age to support roosting features for bats. This hedgerow and associated trees will be retained, therefore no direct impacts to roosting bats (should they be present) are anticipated. However, should the proposals change and resulting in a tree or trees being directly impacted, the Ecological Manager / Ecological Clerk of Works will be consulted to determine requirements for any further survey work.

Foraging and Commuting Bats

In order to reduce the impact of the works on foraging and commuting bats, the following mitigation measures will be implemented:

- The hedgerows and trees scheduled for retention will be protected according to measures outlined in Section 4.1.
- Construction phase lighting, noise and vibration will be kept to a minimum, in line with the measures outlined in Sections 4.4 and 4.5.

Terrestrial Mammals (Badger and Brown Hare)

Badger Setts

As stated in Section 2.2, no badger setts were identified on site or within the immediately surrounding area during the Ecological Walkover (Report RT-MME-160215, 2023), although the

² British Standards Institution (2009) *BS 5228-2:2009 Code of practice for noise and vibration control on construction and open sites*.

site supports suitable sett-building habitat. The following precautionary measures will be therefore implemented:

- Site personnel will remain vigilant and, should any potential badger setts be identified, all works will cease and a suitably experienced ecologist will be contacted for further advice. In the event that any setts are identified within the works footprint and require closure, the need for a replacement sett will be assessed, and details provided in a method statement submitted as part of a Natural England licence application, to ensure that the favourable conservation status of badgers is maintained at the site.
- Clearance of dense vegetation within the site will be undertaken under the supervision of the Ecological Clerk of Works and in accordance with measures for great crested newts and nesting birds outlined below.

Foraging and Commuting Mammals

In order to reduce the impact of the development on foraging and commuting mammals that may use the site, the following construction phase mitigation measures will be implemented:

- Any excavations which are left overnight will be covered or be fitted with ramps to prevent any harm to terrestrial mammals which may pass through the site.
- Any open pipework with an outside diameter of greater than 150 mm must be covered at the end of each work day to prevent terrestrial mammals entering/becoming trapped.
- Construction phase lighting, noise and vibration will be kept to a minimum, in line with the measures outlined in Sections 4.4 and 4.5.

Herpetofauna, including great crested newts

Licensed Works

Due to the identification of a small population of great crested newts within two ponds located adjacent to the site, a great crested newt mitigation licence application has been made to Natural England, submitted in August 2023. The licence application is supported by a detailed method statement. In accordance with this method statement and subject to the licence being granted, it is proposed that a programme of trapping and translocation is undertaken, followed by phased vegetation removal and destructive search.

- Following the licence being granted by Natural England, the site will be subject to a trapping and translocation exercise of 30 days (with 5 days clear of great crested newt captures) using exclusion fencing. Drift fencing will be installed to divide the area. Refugia, consisting of carpet 'tiles' approximately 500 mm x 500 mm, and pitfall traps, consisting of plastic buckets, will be installed along the fence lines to English Nature (2001) specification.
- Refugia and pitfall traps will be checked once a day for great crested newts during the active season, which is weather dependent, but generally accepted to extend between March and October inclusive.
- Any captures will be transferred to a receptor area located around P11, located to the east, and two hibernacula will be created within adjacent habitats to provide terrestrial refuge opportunities in proximity to the site.
- Following completion of trapping, clearance of vegetation within the site can commence. This will comprise the management of vegetation and topsoil strip to be undertaken under direct supervision of a suitably experienced Ecological Clerk of Works and during the active season for great crested newts.

- All great crested newt fencing will be monitored throughout the construction period and kept in good condition.

Details of habitat creation and enhancement measures which aim to compensate for loss of habitats, including those used by great crested newts, will be provided in a method statement submitted as part of a Natural England licence application, to ensure that the favourable conservation status of great crested newts is maintained at the site.

Mitigation outlined for great crested newts above will be appropriate for ensuring common amphibians and reptiles are protected during the works.

General Construction Phase Measures

Implementation of the following additional measures will ensure that there are no impacts on amphibians or reptiles during the construction period of the proposed development:

- Avoidance of creation of potential refuges within active work areas.
 - Amphibians and reptiles will utilise stacked materials such as wood, stone, boards or metal sheets as refuges. Active work areas should be kept tidy and materials should be stored off the ground – for example on pallets where possible. Should it be necessary to store materials such as topsoil on site, then these will be stored in raised skips, trailers or containers on raised pallets.
- Prevention of trapping fauna in open excavations.
 - If any excavations are required to be left open overnight, ramps will be left within them to allow fauna to easily exit. Open excavations will be inspected at start of each day to ensure fauna have not become trapped.
- Staff awareness.
 - All contractors should be made aware of the potential presence of amphibians and reptiles on site during the initial site induction and regular tool box talks.
 - Amphibians and reptiles like to hide under refuges such as those discussed above. Staff should simply demonstrate awareness when working and moving materials. Should a reptile or amphibian other than a great crested newt be found it should be gently moved, for example in a clean bucket, to a suitable location within habitat well away from the working area. It is important to note that all native amphibians are harmless and the best option if encountered is simply to leave the animal alone or, if it may come to harm, move it to a suitable location within habitat on the closest boundary of the site.

As a matter of general good ecological practice, an understanding of amphibians and the undertaking of sympathetic working practices will reduce the likelihood of an encounter with, or harm to, this species group.

Discovery of a Great Crested Newt During Construction

In the event that a great crested newt is discovered within the works area during the construction period (i.e. after all trapping, translocation and vegetation clearance works have been completed), then all works will cease and the Ecological Clerk of Works will be contacted immediately to determine how to proceed.

Birds

In order to avoid any breach of legislation with regard to nesting birds in general, the following measures will be implemented:

- Vegetation management and clearance will be undertaken outside of the bird nesting season. The bird nesting season is weather dependent but generally extends between March and September inclusive (peak period March-August). If this is not possible, then any vegetation to be removed or disturbed or buildings to be demolished or refurbished will be checked by an experienced ecologist for nesting birds immediately prior to works commencing. If birds are found to be nesting, any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally, for example via the implementation of an appropriate buffer zone (species dependent) around the nest in which no disturbance is permitted until the nest is no longer in use.
- The hedgerows, trees and dense scrub to be retained will be protected according to measures outlined in Section 4.1.
- Noise and vibration will be kept to a minimum, in line with the measures outlined in Section 4.5.

4.9 Timing Restrictions

Table 4.1 details a master timetable of works constrained by timing restrictions in order to minimise the ecological impact of the works within Amber Zones.

Protected Species	Time of Year											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<i>Clearance of above ground vegetation i.e., above 150 mm</i>												
Herpetofauna	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Nesting birds	✓	✓	*	*	*	*	*	*	*	✓	✓	✓
<i>Clearance of vegetation below 150 mm / potential hibernacula and refuges</i>												
Herpetofauna	x	x	✓	✓	✓	✓	✓	✓	✓	✓	x	x
Key: ✓ Suitable time for activity to be undertaken (subject to approval from Ecological Clerk of Works) * Possible time for activity to be undertaken. All vegetation clearance must proceed in accordance with methodologies detailed in Section 4.8. x: No works permitted.												

Table 4.1: Master Timetable of Timing Restricted Work Activities

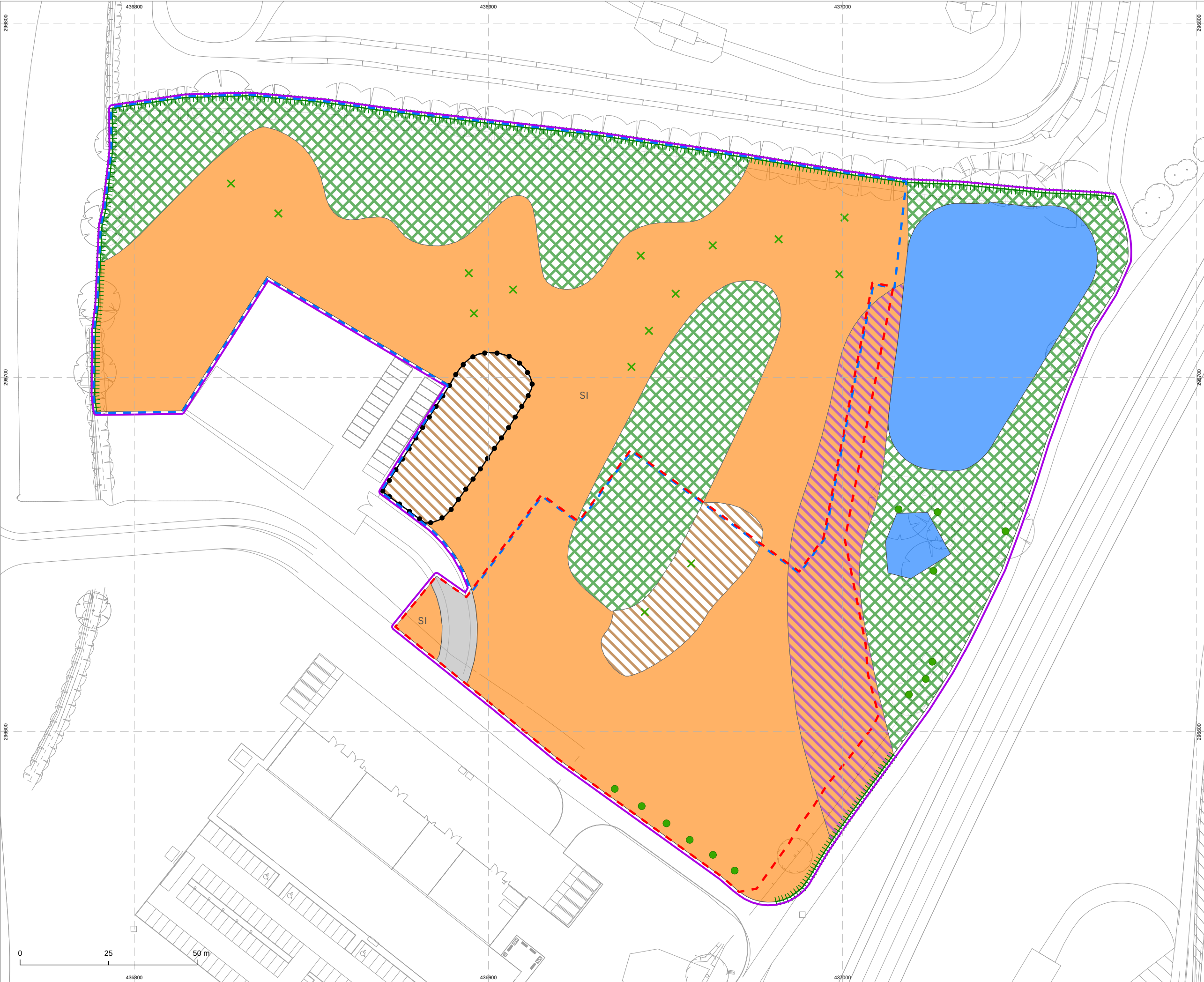
4.10 Contingency Measures

Should any unexpected events occur, e.g. the discovery of unexpected species on site, work will cease and the Ecological Manager / Clerk of Works will be contacted to determine the most appropriate way to proceed.

5. Drawings

Drawing C161054-01-01 – Phase 1 Habitat Map

Drawing C161054-01-02 – Biodiversity Protection Zones



C161054-01-01-RevA

Legend

Habitat survey boundary

Phase 1 development boundary

Phase 2 development boundary

Scattered scrub

Scattered tree

Raised bank

Species-poor hedgerow with trees

Dense scrub

Hardstanding

Marshy grassland

SI

Semi-improved neutral grassland

Standing water

Tall ruderal

Project

MIRA NW08

Drawing

Phase 1 Habitat Map

Client

HORIBA MIRA Ltd.

Drawing Number

C161054-01-01-RevA

Revision

RevA

Scale @ A3

1:1,000

Date

October 2023

Approved By

HG

Drawn By

VO

MIDDLEMARCH

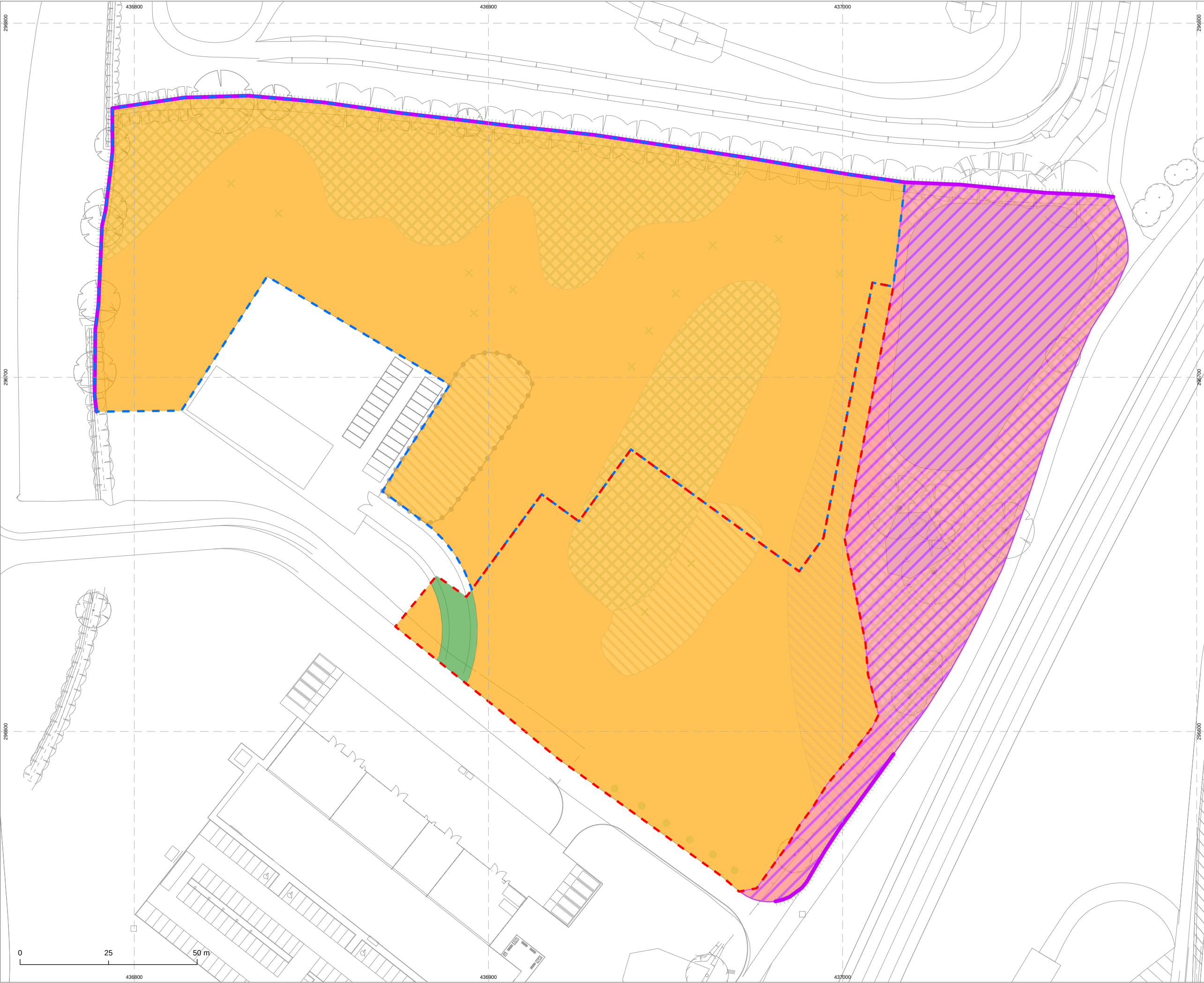
Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ

T:01676 525880

E:admin@middlesmarch-environmental.com

This map is reproduced from the Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationary Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution of civil proceedings.

Licence Number: 100040519



C161054-01-02-RevA

Legend

Phase 1 development boundary

Phase 2 development boundary

Subject to enhancement works

Red zone

Amber zone

Green zone

Phase 1 Habitats:

Scattered scrub

Scattered tree

Raised bank

Species-poor hedgerow with trees

Dense scrub

Hardstanding

Marshy grassland

Semi-improved neutral grassland

Standing water

Tall ruderal

Note: The whole site area will be subject to a great-crested newt mitigation licence with associated requirements

Project

MIRA NW08

Drawing

Biodiversity Protection Zones

Client

HORIBA MIRA Ltd.

Drawing Number

C161054-01-02-RevA

Revision

RevA

Scale @ A3

1:1,000

Date

October 2023

Approved By

HG

Drawn By

VO

MIDDLEMARCH

Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ

T:01676 525880

E:admin@middlemarch-environmental.com

This map is reproduced from the Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationary Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution of civil proceedings.

Licence Number: 100040519

Appendix 1

Summary of Relevant Wildlife Legislation

Bats

Bats and the places they use for shelter or protection (i.e. roosts) receive legal protection under the Conservation of Habitats and Species Regulations 2017 (Habitats Regulations 2017) and the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 (Habitats Regulations 2019). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that bats, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2017, states that a person commits an offence if they:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats; or
- damage or destroy a bat roost (breeding site or resting place).

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

It is an offence under the Habitats Regulations 2017 for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead bats, part of a bat or anything derived from bats, which has been unlawfully taken from the wild.

Changes have been made to parts of the Habitats Regulations 2017 so that they operate effectively from 1st January 2021. The changes are made by the Habitats Regulations 2019, which transfer functions from the European Commission to the appropriate authorities in England and Wales.

All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant.

The obligations of a competent authority in the 2017 Regulations for the protection of species do not change. A competent authority is a public body, statutory undertaker, minister or department of government, or anyone holding public office.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

- Section 9(1) of the WCA makes it an offence to *intentionally* kill, injure or take any protected species.
- Section 9(4)(a) of the WCA makes it an offence to *intentionally or recklessly** damage or destroy, or *obstruct access to*, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to *intentionally or recklessly** disturb any protected species *while it is occupying a structure or place which it uses for shelter or protection*.

*Reckless offences were added by the Countryside and Rights of Way (CROW) Act 2000.

As bats re-use the same roosts (breeding site or resting place) after periods of vacancy, legal opinion is that roosts are protected whether or not bats are present.

The reader should refer to the original legislation for the definitive interpretation.

The following bat species are Species of Principal Importance for Nature Conservation in England: barbastelle bat *Barbastella barbastellus*, Bechstein's bat *Myotis bechsteinii*, noctule *Nyctalus noctula*, soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared bat *Plecotus auritus*, greater horseshoe bat *Rhinolophus ferrumequinum* and lesser horseshoe bat *Rhinolophus hipposideros*. Species of Principal Importance for Nature Conservation in England are material considerations in the planning process. The list of species is derived from Section 41 list of the Natural Environmental and Rural Communities (NERC) Act 2006.

Badger

Badgers and their setts are protected under the Protection of Badgers Act 1992. The Protection of Badgers Act 1992 is based primarily on the need to protect badgers from baiting and deliberate harm or injury, badgers are not protected for conservation reasons. The following are criminal offences:

- To intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it.
- To wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so.

A badger sett is defined in the legislation as:

- 'Any structure or place that displays signs indicating current use by a badger'.

'Current use' is not synonymous with current occupation and a sett is defined as such (and thus protected) as long as signs of current usage are present. Therefore, a sett is protected until such a time as the field signs deteriorate to such an extent that they no longer indicate 'current usage'.

Badger sett interference can result from a multitude of operations including excavation and coring, even if there is no direct damage to the sett, such as through the disturbance of badgers whilst occupying the sett. Any intentional or reckless work that results in the interference of badger setts is illegal without a licence from Natural England. In England a licence must be obtained from Natural England before any interference with a badger sett occurs.

The reader should refer to the original legislation for the definitive interpretation.

Common amphibians

Common frogs, common toad, smooth newt and palmate newt are protected in Britain under Schedule 5 of the Wildlife and Countryside Act (1981, as amended) with respect to sale only. They are also listed under Annex III of the Bern Convention 1979. Any exploitation of wild fauna specified in Appendix III shall be regulated in order to keep the populations out of danger. The convention seeks to prohibit the use of all indiscriminate means of capture and killing and the use of all means capable of causing local disappearance of, or serious disturbance to, populations of a species.

Common toad is listed as a Species of Principal Importance for Nature Conservation in England.

Great crested newt

Great crested newts (GCN) and the places they use for shelter or protection receive legal protection under the Conservation of Habitats and Species Regulations 2017, (Habitats Regulations 2017) and the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 (Habitats Regulations 2019). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that GCN, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2017, states that a person commits an offence if they:

- deliberately capture, injure or kill a GCN;
- deliberately disturb GCN;
- deliberately take or destroy eggs of a GCN; or
- damage or destroy a GCN breeding site or resting place.

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

It is an offence under the Habitats Regulations 2017 for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead GCN, part of a GCN or anything derived from GCN, which has been unlawfully taken from the wild. This legislation applies to all life stages of GCN.

Changes have been made to parts of the Habitats Regulations 2017 so that they operate effectively from 1st January 2021. The changes are made by the Habitats Regulations 2019, which transfer functions from the European Commission to the appropriate authorities in England and Wales.

All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant.

The obligations of a competent authority in the 2017 Regulations for the protection of species do not change. A competent authority is a public body, statutory undertaker, minister or department of government, or anyone holding public office.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

- Section 9(1) of the WCA makes it an offence to intentionally kill, injure or take any protected species.
- Section 9(4)(a) of the WCA makes it an offence to intentionally or recklessly* damage or destroy, or obstruct access to, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to intentionally or recklessly* disturb any protected species while it is occupying a structure or place which it uses for shelter or protection.

*Reckless offences were added by the Countryside and Rights of Way (CROW) Act 2000.

The reader should refer to the original legislation for the definitive interpretation.

GCN are listed a Species of Principal Importance for Nature Conservation in England which means they are a material consideration in the planning process. The list of species is derived from Section 41 list of the Natural Environmental and Rural Communities (NERC) Act 2006.

Nesting Birds

The Conservation of Habitats and Species Regulations 2017, (Habitats Regulations 2017) and the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 (Habitats Regulations 2019) places a duty on public bodies to take measures to preserve, maintain and re-establish habitat for wild birds.

Nesting and nest building birds are protected under the Wildlife and Countryside Act WCA 1981 (as amended).

Subject to the provisions of the act, if any person intentionally:

- kills, injures or takes any wild bird;
- takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
- takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Some species (listed in Schedule 1 of the WCA) are protected by special penalties. Subject to the provisions of the act, if any person intentionally or recklessly:

- disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird, he shall be guilty of an offence.

Several bird species are Species of Principal Importance for Nature Conservation in England, making them capable of being material considerations in the planning process.

Reptiles

All of the UK's native reptiles are protected by law. The two rarest species – sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca* – benefit from the greatest protection.

Common lizard *Zootoca vivipara*, slow-worm *Anguis fragilis*, adder *Vipera berus* and grass snake *Natrix helvetica* are protected under the Wildlife and Countryside Act 1981 (as amended) from intentional killing or injuring.

Sand lizard and smooth snake are protected under the Conservation of Habitats and Species Regulations 2017 (Habitats Regulations 2017) and the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 (Habitats Regulations 2019). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that it is illegal to kill, injure, capture, handle or disturb these animals. Places they use for breeding, resting, shelter and protection are also protected from being damaged or destroyed. In addition, it is illegal to obstruct these animals from using such areas.

All native reptile species are listed as Species of Principal Importance for Nature Conservation in England and as such are material considerations in the planning process.

This is a simplified description of the legislation. In particular, the offences mentioned here may be absolute, intentional, deliberate or reckless. Note that where it is predictable that reptiles are likely to be killed or injured by activities such as site clearance, this could legally constitute intentional killing or injuring.