



Agrarian Development Holdings Ltd

Land South of the A5, Hinckley

APPENDIX 6: ECOLOGY NOTE

May 2024

FPCR Environment and Design Ltd

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1.0 INTRODUCTION

- 1.1 The following report has been prepared by FPCR Environment and Design Ltd. on behalf of Agrarian Development Holdings Ltd. in response to Pre-Commencement Condition 11, part d) of planning consent for development at Padge Hall Farm, Hinckley (Rugby Borough Council Planning Ref: R21/0985).
- 1.2 This document sets out details of ecology survey findings to date and details of pre-commencement ecology checks and appropriate working practices for wildlife and habitats.

Ecology Survey Summary

- 1.3 The findings of a series of ecological surveys undertaken in 2019, 2021, 2022 and 2023 have been used to inform this document. Full details of the surveys undertaken can be found in the Ecological Appraisal (FPCR, 2022¹), Bat Report (FPCR, 2019²), Breeding Bird Report (FPCR, 2021³) and the Bat Mitigation Plan (FPCR, 2021⁴). Further badger, breeding bird, riparian mammal and great crested newt eDNA surveys are ongoing at the time of writing in the 2024 survey period.
- 1.4 The site predominantly comprised intensively managed arable land and improved grassland used for pasture, with field boundaries formed by native hedgerows with mature trees and some with associated ditches. A farm complex was located in the south-western extent of the site and the Harrow Brook with associated trees and species-poor semi-improved grassland ran through the western extent of the site. Other habitats included small areas of scrub at field peripheries and areas of tall ruderal vegetation around the farm complex.
- 1.5 A single internationally designated site, Ensor's Pool SAC is located within a 5km radius of the site and no nationally designate sites are located within a 2km radius of the site. Sections of the River Anker EcoSite which is a tributary of the Harrow Brook historic LWS located to the north of the site. For the purposes of this assessment designation is referred to as the 'Harrow Brook'. The Railway Embankment (Leicester to Birmingham Line) EcoSite & LWS is located adjacent to the south-eastern boundary of the site. A further five non-statutory designated sites are located within a 1km radius of the site.
- 1.6 Habitat surveys to date and the most recent badger survey completed in April 2024 have confirmed that the habitats have not changed since the initial surveys in 2019. The results of these surveys concluded that the site is mostly of intrinsically low conservation value, give the cultivated nature and restricted botanical and structural diversity. The hedgerow network and mature trees as well as the Harrow Brook corridor were considered to be of higher ecological value to the local wildlife.
- 1.7 The surveys undertaken to date, including the most recent badger survey on 19th April 2024 noted that no evidence of badger setts identified on-site or within 30m of the site boundary (where accessible). An old rabbit warren was located within an area of tall ruderal vegetation along the south-western boundary in 2019 which was still present in 2024. The arable habitat, improved grassland and small areas of species-poor semi-improved grassland provide a potential foraging resource for badgers.

¹ FPCR (2022) Land south of the A5, Hinckley – Appendix 10.1A Ecological Appraisal

² FPCR (2022) Land south of the A5, Hinckley – Appendix 10.1B Bat Report

³ FPCR (2022) Land south of the A5, Hinckley – Appendix 10.1B Breeding Bird Report

⁴ FPCR (2024) Padge Hall Farm, Hinckley – Bat Mitigation Strategy

- 1.8 The bat surveys determined that there were 42 trees possessing bat roosting potential within the site boundary, the majority of which are to be retained along the Harrow Brook corridor, whilst relatively low numbers of common and widespread species were recorded during the transects. Five trees with moderate potential (T22, T23, T28, T32 & T38) and two trees with low potential (T30 & T37) are required to be removed to facilitate the development or will be indirectly impacted, however no roosts were confirmed to be present following nocturnal surveys undertaken in June - August 2023 (Bat Mitigation Strategy, FPCR 2024).
- 1.9 Nine buildings are associated with the farm complex. Update nocturnal surveys in 2023 confirmed the presence of a single common pipistrelle *Pipistrellus pipistrellus* roost within building B2 (Roost 1) and a single common pipistrelle roost within building B4a (Roost 2). A Natural England licence will be obtained to legitimise the works. All demolition works will follow the mitigation detailed within the Bat Mitigation Strategy and the subsequent Licence.
- 1.10 Breeding bird surveys to date have identified 41 species within the site with the assemblage typical of the habitats present, comprising common and widespread species. The habitats within the site were also considered to be of local nature conservation value for the farmland bird assemblage recorded. The hedgerows and wooded habitats across the site provided breeding and foraging opportunities for the generalist and woodland species recorded, while the arable habitats supported ground nesting birds including skylark *Alauda arvensis* which were recorded as probable breeders within the site. Further update breeding bird surveys are scheduled for May & June 2024.
- 1.11 There is no suitable breeding for GCN within the site and eDNA surveys of the on-site pond in April 2019 and April 2024 returned negative results for this species. Access was not granted to survey additional ponds within 500m of the site boundary, however intervening habitats were considered unsuitable. Potentially suitable terrestrial habitat for amphibians was limited to the hedgerow bases and small areas of scrub, tall ruderal vegetation and species-poor semi-improved grassland along the brook.
- 1.12 During the initial habitat survey, it was considered that the Harrow Brook was of some value to water vole *Arvicola amphibius* and otter *Lutra lutra*. The desktop study identified records of otter and water vole upstream along the Harrow Brook and Ashby Canal pLWS. No evidence of water vole or otter have been recorded to date and update surveys are scheduled for May 2024.
- 1.13 This document lists the relevant legislation associated with the species considered likely to be present on-site. The subsequent sections will then detail the recommended working practices to be carried out in each of the following three phases of development:
- Phase 1 – Pre-Commencement & Site Clearance
 - Phase 2 – Construction
 - Phase 3 – Post-Development

2.0 RESPONSIBILITIES FOR UNDERTAKING WORKS – ALL PHASES

- 2.1 All works at all stages are to be overseen by the Principal Contractor whose duties will include:
- Arrange site-wide species monitoring as required during the development;
 - Oversee the agreed programme of environmental monitoring;
 - Contribute to communication on environmental matters with stakeholders and statutory bodies;
 - Arrange appropriate inspections and audits to be undertaken to ensure compliance with the CEMP;
 - Monitor implementation of any corrective action required;
 - Monitor the Developer's management of environmental complaints;
 - Provide a detailed plan for managing the requirements of the CEMP prior to work commencing;
 - Ensure that practical arrangements are in place to comply with the CEMP;
 - Keep records to demonstrate implementation of the CEMP;
 - Ensure full co-operation with the site environmental inspection and audit programme;
 - Monitor the environmental performance of sub-contractors and provide direction as necessary;
 - Monitor the site activities to ensure that all relevant environmental legal consents, licences and exemptions are in place in advance of relevant works commencing, and that the requirements are adhered to; and
 - Co-ordinate the periodic review of the CEMP.
- 2.2 The Principal Contractor shall be responsible for ensuring an appropriate ECoW is present on-site as required to ensure the measures as recommended within this CEMP (and any other relevant ecological documents) are followed. Duties of the ECoW include:
- Act as the Developer's main point of contact in relation to environmental issues and liaison officer with relevant statutory bodies as necessary;
 - Provide environmental awareness training site staff as required/when requested to support CEMP implementation;
 - Ensure that an appropriately qualified ecologist undertakes the required on-site surveys etc. in the event that the ECoW cannot attend site;
 - Ensure that appropriate advice is provided to the Principal Contractor to allow them to undertake any required corrective ecological actions in line with the relevant procedures when required; and
 - Undertake periodic reviews of the CEMP with the Principal Contractor
- 2.3 The on-site works shall be overseen by the Principal Contractor who will contact the ECoW for advice as necessary. As part of the works associated with establishing the site the ECoW will provide toolbox talks for all non-ecological personnel with appropriate training and information when requested.
- 2.4 The Principal Contractor shall also be responsible for the continued maintenance of any protective fencing (e.g. root protection areas) during all on-site works and ensure that all appropriate

ecological reports etc. are kept in the site office available for reference at any time. Contact details for an appropriate ecological consultant shall also be kept in the same location.

- 2.5 The ECoW responsible is Hayley Hurst, FPCR Environment and Design Ltd, Lockington Hall, Lockington, Derby, DE74 2RH, 01509 672772.
- 2.6 In conjunction with having overarching responsibility for the ecological measures as detailed within this report the Principal Contractor will also ensure that all appropriate site protection measures are implemented in order to ensure no inadvertent effect upon ecological features.

3.0 ECOLOGICAL FEATURES, RISK ASSESSMENT AND RELEVANT LEGISLATION

- 3.1 Table 1 considers the retained habitats that are sensitive to construction activities and identifies the potential risks to these as a result of construction works.

Table 1: Assessment of Risk to Habitats

Habitat	Relevant Legislation / Policy	Assessment of Risk
Hedgerows and Trees	The hedgerow within the proposed development comprises over 80% native species and hence is recognised as a Habitat of Principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.	There is a risk of: root compaction, damage to roots through pollution or incorrect storage of materials, damage to branches during site clearance, and accidental removal of excessive areas of hedgerow and/or trees.
Grassland	N/A	There is a risk of: pollution from dust, and run off during construction activities, including accidental spillages, compaction and poaching, damage through incorrect storage of materials, accidental removal of areas.
Watercourse	The River Anker EcoSite (Harrow Brook) runs through the western extent of the site. Rivers and streams are listed as a Priority Habitat of the LBAP.	There is a risk of: pollution from dust, and run off during construction activities, including accidental spillages, and damage to the watercourse during construction.

Fauna

- 3.2 Notable and protected faunal species that are known to be present within the site, or may potentially be present and could be affected by development activities comprise the following:

Table 2: Assessment of Risk to Fauna

Species	Relevant Legislation / Policy	Assessment of Risk
Bats – Buildings B2 and B4 have confirmed bat roosts which are to be demolished. Seven trees with bat roost potential are to be removed. No roosts have been confirmed.	Bats and their roosts are listed on the Conservation of Habitats and Species Regulations 2017 (as amended) making it illegal to deliberately disturb any such animal or damage / destroy a breeding site or roosting place of any such animal. Bats are also afforded full legal protection under Schedule 5 of the Wildlife and Countryside Act (WCA) 1981 (as amended). Under this legislation it is illegal to recklessly or intentionally kill, injure or take a species of bat or recklessly or intentionally damage or obstruct access to or destroy any place of shelter or protection or disturb any animal whilst they are occupying such a place of shelter or protection. Some bat species are Species of Principal Importance under the NERC Act (2006). All local bat species are encompassed by the LBAP.	There is a risk of: killing or injury of bats roosting if present in trees, buildings or structures to be removed. Disturbance of roosting bats, if present
Birds Potential for the presence of nesting birds. Suitable woody vegetation (trees, hedgerow, scrub), and open grassland and arable land present.	Under the WCA 1981 (as amended) it is an offence to kill, injure or take a bird, take damage or destroy a nest in use or being built, take or destroy an egg, possession or control of wild bird or any part or object derived from, or egg or part of one.	There is a risk of: killing and injury of birds and damage to nests during site clearance.
Badger <i>Meles meles</i> No badger recorded on site, although suitable foraging and sett	Animals and their setts are protected under the Protection of Badgers Act (1992) making it an offence to wilfully kill, injure or take a badger (or attempt to do so), cruelly ill-treat a badger, dig for a badger and intentionally or recklessly damage or	There is a risk of: killing and injury of badger due to improper storage of materials, presence of

Species	Relevant Legislation / Policy	Assessment of Risk
building habitats recorded.	destroy a badger sett, or obstruct access to it, cause a dog to enter a sett and disturb a badger when it is occupying a sett.	open excavations and uncapped pipework.
Otter <i>Lutra lutra</i> No otter recorded on site, though suitable habitats recorded.	Otters are protected by the Habitats and Species Regulations 2017 (<i>as amended</i>) and under Schedule 5 of the WCA 1981 (<i>as amended</i>). This makes it an offence to deliberately kill, take or injure an otter, damage, or destroy an otter's place of shelter, or disturb an otter whilst using such a place.	Low risk of killing and injury, disturbance, or the destruction of a place of shelter during site clearance and construction.
Water vole <i>Arvicola amphibius</i> No water vole recorded on site, though suitable habitats recorded.	Water vole are protected under Schedule 5 of the WCA 1981 (<i>as amended</i>). This a water vole, damage, or destroy or block access to a water vole's place of shelter or protection, or disturb a water vole whilst using such a place.	Low risk of killing and injury, disturbance, or the destruction of a place of shelter during site clearance and construction.

4.0 PHASE 1 (PRE-COMMENCEMENT & SITE CLEARANCE)

Proposed Ecological Impacts and Avoidance and Mitigation Measures

4.1 Table 3 below provides a summary timetable of the following.

General Measures

4.2 A suitable site for any portable site office/s space required will be selected. Such an area should avoid the boundary habitats potentially used by commuting wildlife.

Designated Sites

4.3 Heras fencing will surround the proposed working areas of the site where this bounds the Harrow Brook historic LWS and Railway Embankment (Leicester to Birmingham Line) EcoSite / LWS. This will ensure no physical damage occurs to the habitats present during construction.

4.4 Mitigation and site management protocols will be implemented to minimise the risk of the Harrow Brook becoming polluted or directly impacted as a result of the construction process. Mitigation will include:

- A 10m no-working zone from Harrow Brook where required, except where access is required to construct the drainage outfalls, which will be fenced to avoid accidental incursions and habitat damage;
- No plant entering water except where necessary to construct the drainage outfall;
- Best practice working in regards to pollution prevention, detailed in Phase 2 (Construction).

Protection of Retained Hedgerows, Trees and Adjacent Habitats

4.5 A scheme encompassing suitable tree / hedgerow protection fencing will be erected as per the specifications provided within the Arboricultural Assessment (FPCR, 2021⁵). Any ground flora associated with the hedgerows/trees will be protected by the same fencing.

4.6 Works at the site will result in the loss of the majority of the modified grassland which is of minimal ecological value.

4.7 Protective fencing will be used throughout the pre-commencement and construction stages to protect retained and enhanced species-poor grassland areas along the Harrow Brook corridor, as well as the brook itself. Fencing will be appropriate to restrict access to such areas by construction workers / equipment, to ensure no physical damage occurs and to minimise the risk of accidental pollution events as detailed within the Arboricultural Assessment.

4.8 Details of accidental pollution prevention are detailed below in Section 5.0.

Fauna

4.9 The following precautionary measures will be adopted to avoid any potential for harm or welfare issues for terrestrial species:

⁵ FPCR (2021) Padge Hall Farm, Hinckley – Arboricultural Assessment

- Where possible material will be stored centrally within the site within a fenced compound rather than at the edge, and will not be stored in the vicinity of retained habitats;
- Materials should be raised from the ground by storing on pallets to prevent fauna including amphibians from accessing these; and
- Any trenches or other deep excavations will be either covered overnight or provided with a sturdy ramp or other means of escape for animals that may fall in.

Badgers

- 4.10 No badger setts or evidence of badger were recorded on-site or within 30m of the Site during previous surveys, the latest undertaken in April 2024. Five records of badger (provided by BMERC) were recorded between 2010-2016 within 1km of the Site. Habitats within the Site are generally sub-optimal for badgers with limited potential for sett building and foraging. However, badgers are a highly mobile species and given their likely presence in the wider landscape precautions should be provided to identify whether badgers have colonised the Site or the immediate vicinity and to prevent badgers becoming entrapped within excavations during construction.
- 4.11 A pre-commencement survey will be undertaken if initial site clearance works have not been commenced by August 2024 to assess the current status of the badger use of site to ensure that the level of badger activity has not significantly altered since the previous survey. This will include accurate mapping of any active sett entrances by an experienced ecologist should they be found.
- 4.12 In the event that any new badger setts are recorded during operations, a 30-metre buffer should be placed around the sett and no construction should occur within that buffer zone until further notice from the Ecologist.
- 4.13 Should any evidence of badger be recorded during the pre-commencement survey (if required) or during any stage of the development which would require an amendment made to the CEMP the LPA will be informed and these records will be submitted to Warwickshire Biological Records Centre (WBRC).

Bats

- 4.14 The fencing to be installed to protect the hedgerows and trees on-site (detailed below) will ensure the protection of the connectivity around the site for bats (and other wildlife). The extent of the fencing proposed can be found in the Arboricultural Assessment (FPCR, 2021) detailed at Appendix 5 of the CEMP.

Trees

- 4.15 Eleven of the moderate potential trees and 24 of the low potential trees will be buffered within the development and be protected during site clearance in accordance with the Arboricultural Statement detailed at Appendix 5.
- 4.16 Good practice and appropriate measures minimise the potential risk to roosting bats, which have a low likelihood of being present within the on-site trees T22, T23, T28, T30, T32, T37 & T38. The following working methods will be applied to for these trees:
- Tree works will be undertaken under the supervision of a licenced bat ecologist and outside of the winter period;

- A detailed check of the trees for bats/bat evidence will be undertaken by an experienced tree surgeon & / or licenced bat ecologist prior to works;
- Sectional removal of the tree in 1-1.5m lengths with checking of any exposed features and where necessary careful lowering to the ground of material. The tree surgeon will aim to avoid cutting through features with roost potential such as fissures or cavities; and
- Retention of cut sections on the ground overnight prior to chipping or removal from site.

4.17 In the unlikely event bats / bat evidence is recorded during any of the above steps, works must cease immediately, and further advice sought from the ecologist. Natural England will be contacted if appropriate, and a licence may be required to legitimise destruction of a confirmed roost. In such a circumstance, further detailed advice would be provided.

Buildings

- 4.18 No ecological constraints have been identified in respect of roosting bats for the demolition of buildings B1, B3, B4b, B5, B6, B8 or B9.
- 4.19 Due to the presence of small, occasionally-used common pipistrelle roosts recorded within buildings B2 and B4a the demolition will commence under ecological supervision and in accordance with the bat Licence which is currently being sought. An outline mitigation strategy is detailed within the separate Bat Mitigation Plan.
- 4.20 Prior to the commencement of works, all contractors undertaking works to the on-site buildings, where works carry a risk of disturbing bats and / or damaging or destroying roost sites, must attend a toolbox talk delivered by a licenced bat worker. The toolbox talk will outline legislation relating to bats; measures that will be used to protect them; good working practices; licensable activities and what to do should bats be found on site.
- 4.21 All licensable works must be carried out best using practice methodologies during suitable weather conditions and supervised by a licenced/accredited ECoWs. Working methods would be subject to agreement with Natural England as part of the Licence application. Where direct ecological supervision is not possible due to health and safety issues e.g. internal asbestos removal, contractors will be briefed by the ecologist regarding suitable working methods.
- Examples of licensable works which will require ecological supervision are provided below:
 - Roofing works; inclusive (but not limited to) removal of; roof / ridge tiles, fascia boards, soffit boxes, bargeboards/ roof verges, roof lining.
 - Eaves works (both internal and external).
 - Chimneys, rainwater goods, lead flashing etc.
 - Removal of cladding and demolition of brickwork (where Potential Roost Features or access points are present)
 - Any additional works which will result in impacts to potential roost features and/or access points.

Breeding Birds

- 4.22 The removal of woody vegetation such as sections of hedgerow and areas suitable for ground nesting birds should be undertaken outside of the bird nesting season, i.e. avoiding clearance

works during March to mid-September, inclusive. Where this is not possible, the vegetation will first be checked by the ECoW to confirm the absence of nesting birds.

- 4.23 Where nesting birds are present an exclusion zone will be set around the nest (as determined by the ECoW and suitable for the species nesting), cordoned off with high visibility tape or mesh fencing within which no works can occur until the birds have fully fledged.
- 4.24 Any site visit by the Ecologist will be followed up with a written summary to Agrarian Development Holdings Ltd. / the Principal Contractors as appropriate, outlining the results of the survey and any resulting timing restrictions or other implications for works and / or specific actions required.

Water Vole and Otter

- 4.25 In addition to protective fencing providing a 10m buffer between the works and the on-site watercourse for the duration of works (except for where access is required to construct the drainage outfall) will be established and pollution control measures will be implemented to minimise the risk of pollution to these watercourses as outlined above and below.
- 4.26 Should works subsequently be required to the on-site watercourse and associated habitats, advice must be sought from the ECoW due to the potential for water vole and otter along the watercourse.
- 4.27 An additional survey will be completed in advance of the commencement of works due to the possibility of new nests / burrows being created since the previous survey was completed. Should any evidence of water vole or otter be recorded during this survey or during any stage of the development which would require an amendment made to the CEMP, the LPA will be informed and these records will be submitted to WBRC.

Amphibians and Reptiles

- 4.28 No GCN or reptiles have been identified during the survey work to date. Given the low suitability of habitat present within the site, they therefore are considered to have no more than a low risk of being present on-site during works. Other amphibian species also have potential to be present.
- 4.29 However, a precautionary approach is to be followed with the clearance of any suitable habitats such as long sward grassland and tall ruderal to be undertaken as follows:
 - Clearance of suitable habitats will be preceded by directional strimming towards retained/offsite habitats to avoid accidental killing or injury of amphibians or reptiles;
 - The vegetation will be given two cuts in the direction of retained or off-site habitats. The first cut will be to c.200mm and the second 1-2 hours later to c.50mm;
 - All arisings will be removed from the working area to prevent potential areas of refugia from being used by amphibians or reptiles moving across the area;
 - The above works should be undertaken during suitable weather conditions (when the daytime temperature is above 10°C) between mid-March and October, inclusive; and
 - Upon completion of the above the on-site habitats should be maintained as unsuitable (i.e. with a short sward or without vegetation cover) throughout the construction works to discourage amphibians and reptiles from colonising previously cleared areas.

Table 3: Phase 1 Timetable - Pre-construction

Habitat Feature or	Activity	Mitigation	Recommended timing	Responsibility
Trees and Hedgerows and associated ground flora	Protective fencing to be installed	Tree protection fencing shall be erected as per the specifications within the Arboricultural Assessment (FPCR, 2021).	All year round as appropriate, prior to site clearance commencing	Principal Contractor
Retained Grassland	Protective fencing to be installed	Installation of fencing to protect retain and enhanced areas of grassland. Best practice with regards to pollution prevention and no works or storage of materials to take place within protection zones.	All year round as appropriate, prior to site clearance commencing	Principal Contractor
Harrow Brook	Protective fencing to be installed	Installation of 10m buffer around the Harrow Brook. Best practice with regards to working near water and construction.	All year round	Principal Contractor
Bats	Pre-works inspection of all trees	Protective fencing to be installed as above. Avoid artificial lighting of retained habitats. Felling of trees with low potential to support roosting bats to be undertaken using soft felling techniques (and supervised by an experienced tree worker / licensed bat worker).	All year round	Principal Contractor with advice assistance from the ECoW
	Building demolition	Under the Licence any works carried out will be under the supervision of a suitably qualified and licenced ecologist.	All year round	Principal Contractor with advice assistance from the ECoW
Badgers (and other wildlife)	Precautionary working methods	Pipes greater than 150mm must be capped overnight to prevent access from badger or other mammals. Any pits or holes will include a means of escape for mammals e.g. sturdy timber plank ramp. Any soil piles must be covered over or compacted down to discourage sett building.	All year round	Principal Contractor with advice assistance from the ECoW

Habitat Feature or	Activity	Mitigation	Recommended timing	Responsibility
Birds	Site works preparation and pre-commencement check	In the event that nesting birds are present (following the pre-commencement check by an ecologist) either as ground nesting species or within suitable habitats including hedgerows, trees and scrub, an exclusion zone should be set around the nest (suitable for the species nesting) within which no works can occur until the birds have fully fledged.	March to August inclusive	Principal Contractor with advice assistance from the ECoW
Water Vole and Otter	Protective fencing to be installed	Pre-commencement survey to be undertaken by an appropriately-experienced ecologist. If evidence of nests or burrows are recorded on-site or within 5m of the site boundary then a detailed mitigation strategy will be devised if it is not possible to relocate the position of the drainage outflow. Protective fencing will be erected prior to the commencement of works running adjacent to Harrow Brook (where required) allowing a 10m buffer of the brook.	All year round as appropriate	Principal Contractor
Amphibians	Precautionary working methods	Long sward vegetation to be subject to directional, staged strimming, with areas maintained as unsuitable following clearance.	March – October in suitable weather conditions	Principal Contractor

5.0 PHASE 2 (CONSTRUCTION)

Proposed Ecological Impacts and Avoidance and Mitigation Measures

General

- 5.1 Site workers will be briefed on the potential ecological constraints on-site, associated legislation and their responsibilities at induction by the ECoW as required. A copy of this report will also be held at the site office for reference.
- 5.2 All workers should work with due care and attention with respect to the potential presence of protected species on site and any observations of such species reported immediately to the Principal Contractor with advice sought from the ECoW if necessary.
- 5.3 The Principal Contractor and Site Contractors will monitor ecological issues during the course of clearance and construction. This will include weekly checks of the protective tree fencing to ensure its integrity and correct positioning, with repairs made as necessary and weekly monitoring of boundary areas to check for the presence of any signs of possible badger digging.
- 5.4 General good working practices should be adhered to, including if any trenches dug during works activities are left open overnight. These should be left with a sloping end or ramp to allow any badgers or other animal that may enter to escape. Also, any pipes over 150mm in diameter should be capped off at night to prevent animals entering.
- 5.5 Environment Agency guidance for working near water, including Harrow Brook should be followed at all times (Environment Agency 2007); this includes but is not limited to the following:
- Fuel stored on site will be stored in double bunded fuel tanks. Spill kits will be readily available if required.
 - Any spillages (e.g. diesel) should be cleaned up immediately. Efforts will be made to stop a spill at the source. If the primary container or secondary containment have been breached or failed for any reason, the spill will try to be contained where it happened. This will reduce the quantity of material released, reducing the amount of spilt material that can cause pollution.
 - If it is not possible to stop the spill at source, significant attempts will be made to stop it as close to the source as possible. If possible the spilling material will be safely moved into another container to limit the size of the spill. Use of a suitable container and pump may be required.
 - In the event of a spillage on site, the material should be contained (using an absorbent material such as sand or soil or commercially available booms). Sorbents will be used to soak up a spill and stop it spreading on hard surfaces. Using sorbents generates waste and this method will only be used on small spills, or where a spill has been contained to stop any further spread. All used sorbents will be disposed of at an accredited site for disposal.

Hedgerows and Trees

- 5.6 A scheme encompassing suitable tree / hedgerow protection fencing will be erected as per the specifications provided in the Arboricultural Assessment (FPCR, 2021). Any ground-flora associated with the hedgerows/trees will be protected by the same fencing.

Fauna

Bats

- 5.7 During the works to avoid any impacts associated with operational light spill to potential bat flight-lines or foraging habitat, the following methods will be used to prevent impacts:
- The direct lighting of existing trees and hedgerows or proposed flood attenuation facilities would be prevented;
 - Lighting should be directional and light spillage will be avoided; and
 - All works should be carried out during daylight hours.

Badgers (Hedgehogs and Other Wildlife)

- 5.8 Any excavations, trenches or pits relating to the development should be covered overnight to avoid entrapment of badgers or if left open an egress point (e.g. mammal ladders or a roughened plank) will be placed within the excavation to form a ramp to allow badgers to escape. All excavations should be inspected each morning to ensure no badgers have become trapped overnight, if a badger is found an ecologist must be contacted immediately for further advice. Contractors should be made aware trapped badgers may dig a temporary sett into the side of a trench.
- 5.9 The storage of topsoil or other 'soft' building materials on site must be given careful consideration. Badgers may use these mounds in which to create new setts. Any mounds created will be subject to regular inspections.
- 5.10 All chemicals or materials that may harm badgers must be safely stored away from potential badger habitat and contained in such a way that they cannot be accessed or knocked over by badgers.
- 5.11 Open pipe-work larger than 150mm outside diameter should be blocked off at the end of each day, thereby preventing badgers (or other fauna) from becoming trapped.
- 5.12 If during construction any new setts or areas of digging within or immediately adjacent (within 30m) to the construction zone are identified, all works must cease and the ECoW must be contacted for further advice.

Amphibians and Reptiles

- 5.13 Habitats within the development area potentially providing suitable terrestrial habitat for amphibians and reptiles will be cleared during the pre-commencement stage. In the extremely unlikely event that GCN and/or reptiles are found during construction, all works must cease, and the Ecologist contacted for further advice.

Nesting Birds

- 5.14 It is recommended that wherever possible any woody or ground vegetation removal required is undertaken outside of the nesting season (March – August inclusive) to avoid constraints. Where this is not possible, vegetation to be removed should be checked for the presence of nesting birds by the ECoW prior to removal. Where nesting birds are present an exclusion zone should be set around the nest (suitable for the species nesting) within which no works can occur until the birds have fully fledged as confirmed by the ECoW.

Water Vole and Otter

- 5.15 A small section of Harrow Brook is to be impacted by the development in the form of a headwall. Precautionary measures are to be followed, in addition to protective fencing providing a 10m buffer from the watercourse where required (except for where access to the brook is required for the construction of the drainage outflow) for the duration of works, pollution control measures will be implemented to minimise the risk of pollution to Harrow Brook which are outlined above.
- 5.16 Should additional works subsequently be required to the brook and associated habitats, advice must be sought from the ECoW due to the potential for water vole and otter along the watercourse.
- 5.17 Table 4 below provides a summary of the works to be undertaken.

Table 4: Phase 2 Timetable - Construction

Habitat or Feature	Activity	Mitigation	Recommended timing	Responsibility
Trees and Hedgerows and associated ground flora, retained grassland and Harrow Brook corridor	Ongoing construction works	Tree protection fencing shall be erected as per the specifications within the Arboricultural Assessment. No storage of materials, ground works or storage of materials should take place within these areas.	All year round as appropriate	Principal and Site Contractors
Bats	Site lighting during construction works	The direct lighting of existing trees and hedgerows or proposed flood attenuation facilities would be prevented. Lighting should be directional and light spillage will be avoided. All works should be carried out during daylight hours.	All year round as appropriate	Principal and Site Contractors
Badgers	Ongoing construction works	Any open trenches or similar adjacent must be covered at night or installed with a wildlife ladder to prevent badger entrapment. Any soil piles must be covered over or compacted down to minimise the risk of badgers digging in to create setts. In the event that any potential evidence of badgers within the site boundary is noted during the construction works an ecologist will be contacted to undertake a site survey. If the presence of a badger sett is confirmed a Licence may be required in order to allow works to take place within 30m of the sett. Under the Licence any works considered to potentially disturb the sett can only be undertaken between July and November (inclusive).	All year round as appropriate	Principal and Site Contractors

Habitat or Feature	Activity	Mitigation	Recommended timing	Responsibility
Amphibians / Reptiles	Ongoing construction works	Pre-works hand-search of appropriate areas by a suitably experienced ecologist. In the extremely unlikely event a GCN is observed all works will cease and further advice sought. Any reptiles observed will be carefully translocated to a suitable area of retained habitat.	April to September inclusive	Principal and Site Contractors with advice assistance from the ECoW
		Storage of on-site material on pallets	All year round as appropriate	
Nesting birds	Ongoing construction works	Woody vegetation removal and ground clearance to take place outside of the bird nesting season or under the supervision of an ecologist. Where nesting birds are present an exclusion zone to be determined by the ECoW should be set around the nest (suitable for the species nesting) within which no works can occur until the birds have fully fledged.	September to February inclusive or March to August following a nesting bird check	Principal and Site Contractors
Water vole and Otter	Ongoing construction works	Fencing erected 10m from Harrow Brook (where required) to ensure the integrity of the habitat remains intact. Pollution control measures will be implemented to minimise the risk of Harrow Brook becoming polluted.	All year round as appropriate	Principal and Site Contractors

Habitat or Feature	Activity	Mitigation	Recommended timing	Responsibility
General Measures	Ongoing construction works	All fuel, oil and chemical storage will be sited on an impervious base within a bund and secured. The base and bund walls will be impermeable to the material stored and of an adequate capacity. Leaking or empty oil/fuel drums will be removed from the site immediately and disposed of via a licensed waste disposal contractor. Where possible, refuelling of mobile plant will be carried out in a designated area, preferably on an impermeable surface and away from any drains or watercourses. A spill kit will be available at all times during the refuelling procedure. Vehicles will be attended at all times during refuelling. Daily checks of hoses and valves will be carried out for signs of wear. Valves will be turned off and securely locked when not in use. Diesel pumps and similar equipment (if required) will be placed on drip trays to collect minor spillages. These would be checked regularly and any accumulated oil removed for disposal at registered disposal area.	All year round as appropriate	Principal and Site Contractors

6.0 PHASE 3 (POST-DEVELOPMENT)

General Measures

- 6.1 Please refer to the Landscape and Ecological Management Plan for full details of habitat enhancement and creation measures and their subsequent management.