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Construction Ecological Mitigation Plan

Survey site: **Land adjacent to 315 Bar Restaurant, Lepton, Huddersfield HD8 0LX**

Client: John Froud

Date: 02/03/2026

Project:

This report is prepared to inform a planning application with **Kirklees Council.** The proposal is described as: *The construction of a self-build residential dwelling*

Planning Application Number: 2025/62/91961/E

This Construction Ecological Management Plan (CEMP) has been prepared for the above-named client to outline measures to be implemented before and after construction works at the above-named site.

The purpose of this plan is to ensure the protection and mitigation of ecological receptors, adhere to best practices and industry standards, and provide adequate supervision by licensed professionals. The CEMP also outlines the management frameworks required for the planning and implementation of construction activities that comply with legislation and the environmental commitments.

The below table provides the wider ecological context of the site and details any associated planning conditions.

Site Context and Landscape History	
A Preliminary Ecological Appraisal and Roost Assessment (PEAPRA) was conducted by Arbtech Consulting Ltd in October 2024 (Arbtech, 2024). The rectangular survey site is centred on National Grid Reference SE 2015 7522 and has an area of approximately 0.1ha. The site consists of two outbuildings, surrounded by well managed grassland, planted saplings and scattered flower beds. The wider site ownership boundary consists of further other neutral grassland field, hedgerow boundaries and scattered trees of mixed ages. The site is situated in a low-density context surrounded by scattered residential dwellings, arable fields and roads. Rod's beck flows adjacent to the northern site ownership boundary. The site sits ~1.8km east of Fennay Bridge and ~280m northwest of Low wood. The A642 roads runs along the southern border of the ownership boundary.	
Planning Conditions	
Condition 6	*No works shall take place until a Construction Environmental Management Plan (CEMP: Biodiversity) has been submitted to and approved in writing by the local planning authority. The CEMP (Biodiversity) shall include the following:* *a) Summary of potentially damaging activities* *b) Identification of "biodiversity protection zones"* *c) Pollution Prevention Plan for the watercourse (using good practice guidance such as CIRIA C532)* *d) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (these may be provided as a set of method statements)* *e) The location and timing of sensitive works to avoid harm to biodiversity features.* *f) The times during construction when specialist ecologists need to be present on site to oversee works.* *g) Responsible persons and lines of communication.*

	h) The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person. *i) Use of protective fences, exclusion barriers and warning signs.* *The CEMP must also include the following specific plans / documents:* • *Precautionary Working Method Statements for birds, hedgehogs, badgers, reptiles, and amphibians.* *The approved CEMP: Biodiversity shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority. Reason: This is a pre-commencement condition in the interests of biodiversity and in accordance with Policy LP30 of the Kirklees Local Plan and Chapter 15 of the National Planning Policy Framework 2024.*
Condition 20	Prior to the first occupation of the dwelling hereby approved, one integrated bat box placed on the southern elevation of the dwelling and placed a minimum of 3m off the ground and 3 bird nesting features, shall be installed within the fabric of the building. The nesting features shall be retained thereafter.

Ecological Background Information **Detailed using desk study and site survey.**
Habitats identified during the PEAPRA undertaken by Arbtech in October 2024 at the site include- • Other neutral grassland • Sealed surfaces • Buildings • Other native hedgerows Adjacent to the west of the site • Deciduous woodland. • Watercourse offsite ~200m north. Value for protected species on the site includes the following-

- **Birds**- There is a high volume of nesting opportunities due to the volume of trees around the site, both within the development boundary and wider site.

- **Reptiles**- The wooded edges off site to the west may provide shelter for reptiles, as well as hibernacula features within. However, habitat directly around the area of works is of lower value, due to the managed shorter sward heights in garden areas.
- **Amphibians**- The habitat where the proposed works are to take place is of low value for amphibians and has a lack of features for shelter or hibernation. There are no ponds identified within 500m. Great crested newts are expected absent from these areas. Common species may be present in low numbers.
- **Terrestrial mammals-** The habitats on the site and wider site are likely to support a variety of terrestrial mammals, such as hedgehogs, foxes, rabbits and rodents.

The following tables detail the proposed mitigation, habitat creation and biodiversity enhancement measures for the development as well as management requirements to ensure the longevity of these measures as detailed in the PEAPRA. These include further details of the habitats on site and the impacts of the development upon them and will be read in conjunction with this document.

Scope

This CEMP outlines construction and ecological mitigation and enhancement measures for the following works: *The construction of a self-build residential dwelling.*

Aims and Objectives

This report aims to identify key stakeholder requirements, ensure compliance by all stakeholders with all relevant legislation, minimise potential adverse effects on the environment and protected habitats during construction, and provide site specific methods to avoid, minimise and mitigate construction effects on the environment and notable habitats.

Work Schedules and Ecological Presence

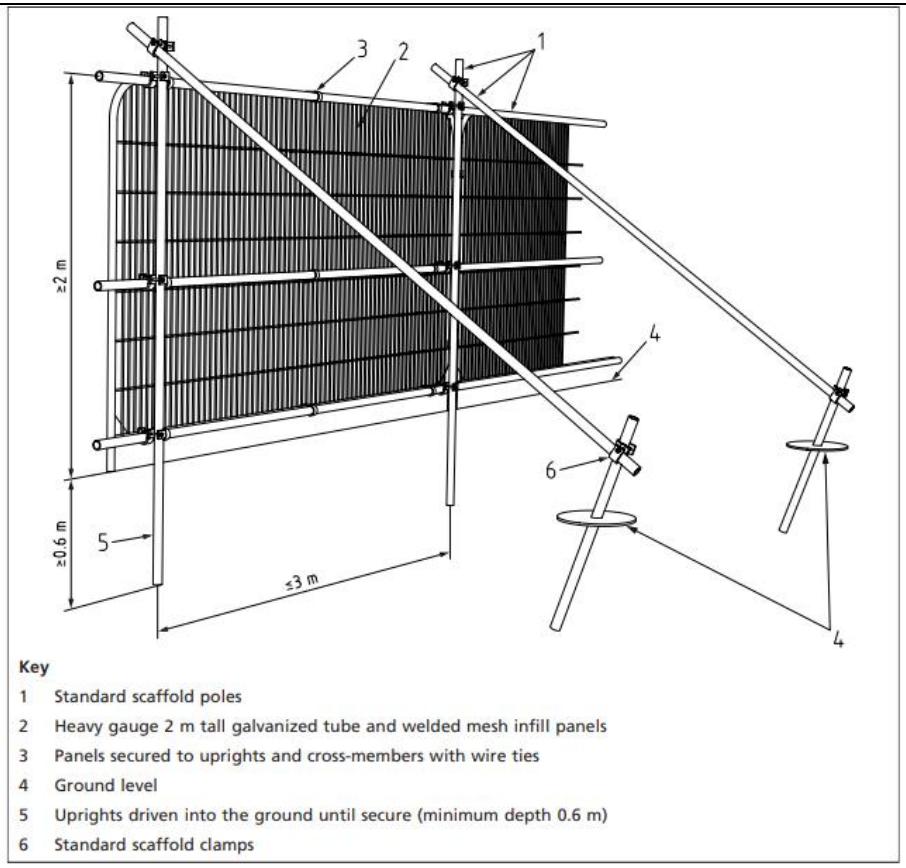
Work schedules will be developed to ensure activities with specific timing requirements are carried out in a manner that minimises harm to ecological receptors. These schedules will be provided to all relevant personnel and contractors involved in the project. The following measures will be implemented:

Persons Responsible and Lines of Communication

A Development Biodiversity Champion is selected for the construction phase of the development. The Biodiversity Champion will be someone with significant influence during construction, such as the contract, site or project manager. They are responsible for ensuring all actions outlined in the approved CEMP are implemented including the provision of a toolbox talk prior to works commencing. Any queries with regards to the mitigation prescriptions will be addressed to the project ecologist and communication will be retained between the Development Biodiversity Champion and project ecologist and/or a suitably qualified Ecological Clerk of Works (ECoW) throughout the construction phase of the development where necessary to ensure the mitigation is applied and impacts to adjacent ecological receptors are effectively minimised. The project ecologist’s contact details are located on the title page of this report. It is recommended that the Biodiversity Champion informs the project ecologist and designated ECoW of the commencement of construction works and provides updates where necessary. The ECoW will provide ecological expertise and guidance throughout.

Table 2- Construction and Ecological mitigation measures

Ecological Mitigation Measures	This table includes any measure required to obtain or comply with planning permission or other consent and to comply with legislation.
Ecological Protection Areas and Buffer Zones	
Ecological protection areas and buffer zones within the project site. These areas will be demarcated using physical means of protection, such as exclusion fencing, to prevent unauthorised access and minimise disturbance to sensitive habitats.	
Tree Protection	
Arboricultural Method Statement produced by Mulberry (November 2025) should be adhered to for works adjacent to the woodland. Tree root protection areas will be identified based on the existing tree inventory. A buffer from retained trees and woodland will be established and protected throughout the duration of construction activity with site access plan agreed with Client/contractor. No trenches or ground works will be completed within the specified buffer of any retained trees on site. Trees will be appropriately protected in accordance with BS 5837:2012 - "Trees in relation to design, demolition and construction – Recommendations". As such, it is recommended that the trees are separated from construction works by protective fencing throughout the duration of the construction phase of the development. A fencing specification is included within **Figure 1** below. Appropriate signage is to be included on the fencing in order to ensure that fences are not moved after establishing. As shown in **Figure 2**	



Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Figure 1: Default protective barrier specification (British Standards Institute 2012).

Figure 2 Appropriate signed to attached to root protection zone fencing- Source- www.Safetysignsandnotices.co.uk

Pollution Prevention	
Risk	Pollution resulting from increased levels of water run-off, noise, and dust creation during construction works have potential to pollute the adjacent woodland and the brook ~200m to the north of the site which is likely to enact adverse impacts upon both plant and animal diversity.
Statutory Compliance	To limit impacts of pollution resulting from the construction phase of the development, construction works must be completed in accordance with current statutory guidelines relating to pollution prevention (Environmental Agency 2016). Furthermore, although withdrawn in 2015, pollution prevention guidelines detailed within guidance document: *PPG6: Working at Construction and Demolition Sites* (Environment Agency 2010) remain applicable to the site. Considering both the relevant statutory requirements and best practice measures detailed within guidance document PPG6, the below mitigation prescriptions are considered suitable to mitigate impacts of pollution during the construction phase of the development. The allocated Biodiversity Champion will be responsible for ensuring the below mitigation recommendations are undertaken successfully during the works.

Buffer from construction activities (watercourses)	A minimum 10m buffer from the connected watercourse ~200m north must be retained from construction activity and material storage for the duration of the construction phase in accordance with current guidelines (Environmental Agency 2016). If a 10m buffer cannot be retained, then secondary containment measures must be put in place in this area to prevent pollution entering the watercourse for both hazardous and non-hazardous waste. Secondary measures implemented within 10m must comprise the use of a secondary containment system such as the construction of an impermeable bund or the use of drip trays. Secondary containment systems must be implemented in accordance with current guidance published by the Construction Industry Research and Information Association (CIRIA) within guidance document *C736F: Containment systems for the prevention of Pollution* (CIRIA 2014).
Materials Storage and Surface Water Runoff	It is recommended that the Biodiversity Champion ensures that: • No stockpiles are created on exposed ground areas and ensure that all materials and chemicals are stored securely and safely on site in accordance with current Control of Substances Hazardous to Health (COSHH) regulations (HSE 2002). • Stockpiles are located as far away as possible from both the woodland and watercourse and on level ground to prevent any accidental run-off. • Contaminated materials, chemicals, and other hazardous substances must be stored on an impermeable surface, in a bunded area, within any area of the site. • All chemicals and hazardous substances are stored away from areas where there is heightened risk of damage from impact or collision such as site traffic. • All chemicals and hazardous substances are labelled, containers are sealed when not in use and inspected regularly and fit for purpose. • Any damaged or old containers are replaced in line with the duty of care requirements. Note such containers may be considered hazardous waste. • Staff are trained in use of spill kits and emergency procedures. • Ensure there is a designated 'responsible person' on site at all times. • Lock storage facilities when not in use.
Site Drainage	It is recommended that the Biodiversity Champion ensures that: • Pollution risks are identified pre-construction. • Pollutants are prevented from entering drains where possible.

	• If any pollutant enters a drain, immediately stop the pollution with a physical block, stop the activity causing the pollution, then notify the Environment Agency for surface water drains or the local sewerage provider for foul water drains. If there's a spill, accident, or emergency, try and prevent pollutants entering the drains. • Report all pollution incidents to site management and the Environment Agency. • Inspect drains and protection measures frequently and maintain them during the construction activity. Well maintained drains will also reduce risks of flooding and subsequent surface water run-off. • As a last resort, should any pollutants be required to enter the drainage system on site, permission from Environment Agency or the local sewerage provider must be sought before discharging anything other than clean uncontaminated surface water to a drain and other surface waters or groundwater. Apply for permission early, as authorisation can take up to four months.
Airborne particle suppression	It is recommended that the Biodiversity Champion ensures that: • Effective water suppression is used during demolition operations. Handheld sprays are more effective than hoses attached to equipment as the water can be directed to where it is needed. In addition, high volume water suppression systems, manually controlled, can produce fine water droplets that effectively bring the dust particles to the ground. • Avoid explosive blasting, using appropriate manual or mechanical alternatives. • Bag and remove any biological debris or damp down such material before demolition. • Carry out regular site inspections to monitor compliance. • Ensure all vehicles switch off engines when stationary. • Avoid the use of petrol- or diesel-powered generators and use mains electricity or battery power where possible. • Only use cutting, grinding, or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction. • Ensure an adequate water supply on the site for effective dust/ particulate matter suppression/ mitigation, using non-potable water where possible and appropriate. • Use enclosed shuts and conveyors and covered skips.
Noise	The Biodiversity Champion must ensure that noise levels are kept to a minimum in accordance with best practice as defined in the Control of Pollution Act 1974 to avoid unacceptable levels of noise and vibrations. Further guidance can be found in British Standard 5228-1:2009. Such measures applicable to the proposed development primarily include agreed working hours limiting night work, using the quietest equipment and plant available, shutting down equipment when not in use, and completing deliveries during working hours only. Most

notably, prescriptions as to limit noise of plant machinery as detailed within **Table B.1** within the code of practice for noise control (British Standards Institution, 2014) is likely to have the most significant impact during construction activity. Table B.1 is shown below.

Table B.1 **Methods of reducing noise levels from construction plant**

Plant	Noise reduction of plant			Alternative plant
	Source of noise	**Possible remedies** (to be discussed with machine manufacturers)	**A-weighted sound reduction** dB	
Hammer drive piling equipment	Pneumatic/diesel hammer or steam winch vibrator driver	Enclose hammer head and top of pile in acoustic screen	5 to 10	Bored piling Vibratory system Drop hammer completely enclosed in box with opening at top for crane access Steel jacket completely enclosing drop hammer with dolly and polystyrene chips fed to impact surface to dissipate energy Pressed-in piling which generates its driving force from the frictional restraint of other piles
	Sheet pile	Acoustically dampen sheet steel piles to reduce levels of resonant vibration		
	Impact on pile	Use resilient pad (dolly) between pile and hammer head. Packing needs to be kept in good condition		
	Cranes cables, pile guides and attachments	Careful alignment of pile and rig		
	Power units or base machine	Fix more efficient sound reduction equipment or exhaust. Acoustically dampen panels and covers. When intended by the manufacturer, engine panels need to be kept closed. Use acoustic screens when possible		
Earth-moving plant: • bulldozer • compactor • crane • dump truck • dumper • excavator • grader • loader • scraper	Engine	Fit more efficient exhaust sound reduction equipment Manufacturers' enclosure panels need to be kept closed	5 to 10	Alternative super silenced plant might be available. Consult manufacturers for details

Table B.1 **Methods of reducing noise levels from construction plant** *(continued)*

Plant	Noise reduction of plant			Alternative plant
	Source of noise	**Possible remedies** (to be discussed with machine manufacturers)	**A-weighted sound reduction** dB	
Compressors and generators	Engine Compressor or generator body shell	Fit more efficient sound reduction equipment Acoustically dampen metal casing Manufacturers' enclosure panels need to be kept closed	Up to 10	Super silenced plant is available. Consult manufacturers for details Electric-powered compressors are available as opposed to diesel or petrol Sound-reduced compressor or generator can be used to supply several pieces of plant. Use centralized generator system
	Total machine	Erect acoustic screen between compressor or generator and noise-sensitive area. When possible, line of sight between top of machine and reception point needs to be obscured	Up to 10	
		Enclose compressor or generator in ventilated acoustic enclosure	Up to 20	
Pneumatic concrete breaker, rock drills and tools	Tool	Fit suitably designed muffler or sound reduction equipment to reduce noise without impairing machine efficiency	Up to 15	Hydraulic and electric tools are available For large areas of concrete, machine designed to break concrete in bending can be used Thermic lance
		Ensure all leaks in air line are sealed		
	Bit	Use dampened bit to eliminate ringing		
	Total machine	Erect acoustic screen between compressor or generator and noise-sensitive area. When possible, line of sight between top of machine and reception point needs to be obscured	Up to 10	
		Enclose breaker or rock drill in portable or fixed acoustic enclosure with suitable ventilation	Up to 20	
Rotary drills, diamond drilling and boring	Drive motor and bit	Use machine inside acoustic shed with adequate ventilation	Up to 15	Thermic lance

Table B.1 **Methods of reducing noise levels from construction plant**

Plant	Noise reduction of plant			Alternative plant
	Source of noise	**Possible remedies** (to be discussed with machine manufacturers)	**A-weighted sound reduction** dB	
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	Sheet pile	Acoustically dampen sheet steel piles to reduce levels of resonant vibration		
	Impact on pile	Use resilient pad (dolly) between pile and hammer head. Packing needs to be kept in good condition		
	Cranes cables, pile guides and attachments	Careful alignment of pile and rig		
	Power units or base machine	Fix more efficient sound reduction equipment or exhaust. Acoustically dampen panels and covers. When intended by the manufacturer, engine panels need to be kept closed. Use acoustic screens when possible		
Earth-moving plant: • bulldozer • compactor • crane • dump truck • dumper • excavator • grader • loader • scraper	Engine	Fit more efficient exhaust sound reduction equipment Manufacturers' enclosure panels need to be kept closed	5 to 10	Alternative super silenced plant might be available. Consult manufacturers for details

Implementation of the Waste Hierarchy	The Biodiversity Champion must ensure that all construction activity is completed in accordance with the Waste Hierarchy (Defra 2011) in an attempt to reduce the amount of waster produced during the construction phase of the development. As such, the construction phase must be completed in accordance with the below core principles: *In the first instance:* • Re-use products and materials where possible. • Recycle and compost material resources where possible. • Attempt to recover energy from waste.

	Where none of the above options offer an appropriate solution, waste disposal is the final option: • Only transfer controlled waste to an "authorised person" (Waste Collection Authority, the holder of an Environmental Permit, Registered Water Carrier or Waste Disposal Authority). • Ensure that non-hazardous waste is transferred under a Waste Transfer Note which must be retained for two years. • Hazardous waste is moved under a waste consignment note that provides a clear description of the waste material. The consignment note must be retained for three years. • The waste is the responsibility of the company until it has been fully recovered or finally disposed of.
Biosecurity and Invasive Species Management[1]	
Invasive/non-native Species Mgt	No invasive non-native species as listed under the Wildlife and Countryside Act (1981) or known otherwise to be problematic are present on site. However, there is a risk that invasive and non-native species could be introduced onto the site during construction via boots, vehicle wheels and imported materials.
Biosecurity	A Biosecurity Declaration Form will be distributed via email to all contractors intending to send plant machinery to the development site. This instructs thot power washing of all plant prior to entry on site to remove all traces of mud debris etc. The completed form must be returned to the site Biodiversity Champion prior to deliver/access. This form and a copy of the CEMP will be sent to all subcontractors that intend to bring machinery onto the site. Upon arrival to site the plant item is inspected at a designated quarantine area. This inspection ensures the delivered plant item has been thoroughly cleaned. Should the item of plant be deemed to be inadequately cleaned it will be refused entry. ***Advice for Contractors on Site.***

[1] https://ccsbestpractice.org.uk/entries/biosecurity-preventing-the-introduction-of-invasive-species-to-site/

https://www.nonnativespecies.org/biosecurity/biosecurity-in-the-field/#:~:text=Basic%20biosecurity%20advice%20for%20site%20visits&text=If%20practical%20do%20not%20take,debris)%20before%20leaving%20the%20site.

	1. Avoid taking any vehicles onto the parkland beyond those essential in completing works, keep to established tracks and park vehicles on established parking areas away from the pasture. 2. Arrive at the site with clean equipment, and vehicle, paying particular attention to wheels. 3. Ensure equipment and footwear is clean (visually from soil and debris) before entering the site. 4. Facilities will be provided on the site in the work zone surrounding the buildings to clean footwear/equipment. ***5.*** Keep access to a minimum. Such robust biosecurity measures will prevent the leaving behind of a degraded environment and subsequent financial bills for the control of introduced invasive species, or any species that may alter communities within nearby designated sites.
Wildlife Protection – Precautionary Methods of Working-	
Herpetofauna	The habitats immediately within the development site are considered suboptimal for amphibians, as the grassland is regularly mown and maintained. There are no known ponds within 500 m of the site. However, the surrounding land within the site ownership provides suitable habitat for common amphibians, with nearby watercourses located approximately 200 m to the north. Therefore, although the development area itself is considered suboptimal, there remains a risk of commuting common amphibians within the site. The development site is also considered suboptimal for reptiles. However, the wider site ownership, including adjacent woodland, provides suitable reptile habitat, with interspersed cover and basking opportunities created by the mosaic of habitat features present. Suitable habitats occur within the adjacent woodland and surrounding areas within the wider site ownership but outside the development boundary. Therefore, there is a potential risk of reptiles being present within these surrounding areas. **Pre Development Vegetation Clearance** Vegetation clearance works must take place outside of the typical hibernation period for reptiles and amphibians, which is typically between November and February. Reptiles and amphibians are mostly torpid during this timeframe and are thus most vulnerable to injury or death. Undertaking vegetation clearance works during their active period, typically between March and September, will allow individuals to disperse unperturbed to adjacent retained habitats. a) Before any development, the ground flora on the affected parts of the site will be strimmed down to 500mm, directed towards off site suitable habitat. Any reptiles or amphibians that are found will be encouraged to move away of their own volition, or if in

	immediate danger or likely to find itself in danger, deposited in a bucket and placed by gloved hand outside of the development area in retained suitable habitat by a suitably experienced ecologist. b) Any spoil/log or rubble piles will be destructively searched for reptiles at the same time. c) Vegetation removal will be phased in two stages: with an initial cutting of all vegetation to approximately 200-300mm from ground level. d) This will be followed by a rest period of at least 24 hours. e) The second cut will be to ground level/ bare ground. Reptiles and amphibians are most likely to be present at or just below ground level; the phased technique allows any individuals present at this vegetation level to disperse. e) In addition to phasing, any cutting will be conducted systematically, towards areas of retained habitat to encourage any individual reptiles and amphibians to retreat to retained habitat unharmed and thus preventing individuals from becoming trapped in a central habitat island. f) The development zone will be then be maintained as bare ground or close mown vegetation. A suitable systematic cutting technique is exemplified below in Figure 3.

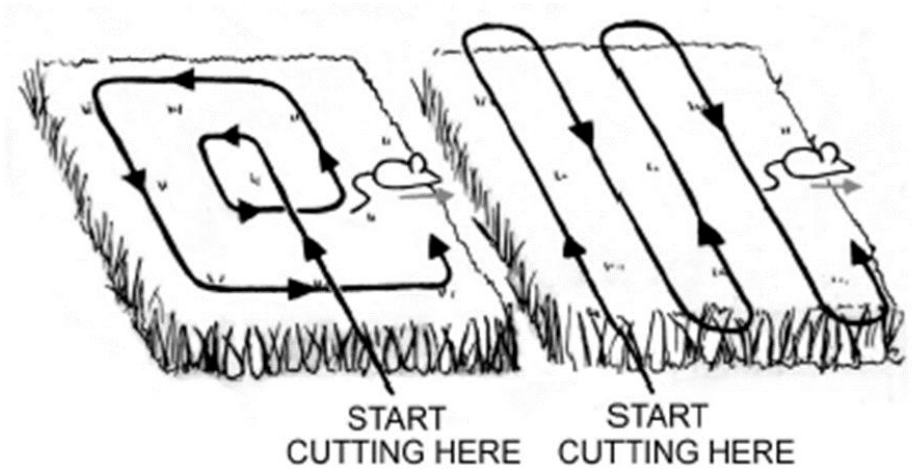


Figure 3: A schematic representation of vegetation cutting patterns as best to eliminate terrestrial opportunities for reptiles and amphibians within the construction zone.

Site Management During Construction

- During the course of construction works a site wide check for reptiles and amphibians must be carried out by contractors at the commencement of each working day, with any found relocated to safety within the tree/hedge line to the east of the ownership boundary. Any materials will be stored on pallets away from tall vegetation or boundaries.
- Rubble created during the development will be safely disposed of in a skip. If no skip is available the rubble will be stored off the ground (e.g. on pallets) until it can be removed from site, to prevent common reptiles and amphibians from using the rubble piles for hibernation or refugia.
- All trenches will (where possible) be backfilled before nightfall, or a ramp will be left to allow amphibians to easily exit. Any trench that could not be closed the previous day must be checked for reptiles and amphibians at the beginning of the next working day; particularly where this is scheduled for infilling.

	• Any chemicals or pollutants used or created by the development will be stored and disposed of correctly according to COSHH regulations. • Where for any reason contractors are a non-compliant and rubble and other piled items are left on the floor overnight or for any period of time beyond that working day, they must be dismantled by hand. • Any reptiles or amphibians found must be encouraged to move away of their own volition, or if in immediate danger and unable to perambulate themselves, will be captured in gloved hand or by any other means avoiding injury and safely relocated to suitable cover within retained habitat. No amphibian will be handled via bare hand due to the risk they may absorb toxic compounds through their permeable skin. • If at any point GCN or reptiles are found during development, all works must cease until further advice has been obtained from a qualified ecologist and the relevant regulators.
Birds	The native hedgerow on site and the adjacent deciduous woodland offsite to the west provide foraging and nesting habitat for a wide range of species. Only the grassland and building habitat areas are being affected, keeping other areas of the site retained for nesting birds to continue using. However, works can see active nest destroyed in habitat areas to be removed, and disturbance to nesting birds in the adjacent woodland. Vegetation clearance/demolition of buildings, and other activities will be undertaken outside the core nesting period 1st March to 31st August. If this timeframe cannot be avoided, a nesting birds check of the vegetation (and any remaining or regrowth vegetation from earlier cuts) will be undertaken, by the project ecologist or ECoW, within 48 hours prior to the commencement of work. All active nests will need to be retained with a species-appropriate (generally 5m) buffer until the young have fledged (species specific but typically 4-6 weeks). A watching brief will be undertaken during clearance in case any nests were not evident during the first check. The buffer will need to be increased in the event of the presence of any Schedule 1 species as reckless disturbance as well of destruction of the nests of such species is an offence. Buffer zones regarding schedule 1 species are on a case by case, species by species basis and must be reflected accordingly.

	If nests are identified, these will need to include signage on any fencing or buffer boundary to raise awareness of their presence. Examples of appropriately installed work signs are shown in **Figure 4.** Signs will be installed in full view in areas where nesting birds have been identified on the pre-work checks.  **Figure 4**- Work signage regarding nesting birds on the site. Source- www.Britishsafetysigns.co.uk

	• Any chemicals or pollutants used or created by the development will be stored and disposed of correctly according to COSHH regulations.
Rabbits	A rabbit warren is present on site. There is a mammal hole present within the building which was identified as likely rabbit warren due to the small size and shape. The grazing and disturbance generating activity of the rabbit population provides a vital ecosystem service in terms of maintaining acid grassland in the absence of livestock. Where possible, damage to warrens will be avoided, as the loss of rabbits will lead to degradation of the site as the species does not construct new warrens readily and is therefore unlikely to re-colonise. Where avoidance of damage is not possible, works must proceed under the understanding that rabbits are protected from unnecessary suffering under the wild mammals Protection Act (1996) and as such must not be deliberately or intentionally caused to suffer via injury, entombment or the estrangement of dependant young. As such any area of warren that must be removed to facilitate the development must be evacuated and closed prior to works as supervised by a specialist pest controller. As the aim is to avoid injury and entombment rather than to control the population, this will be undertaken using non-lethal means (for example ferrets to flush out the affected area). This will be undertaken at a time of year when kits are least likely to be present, such as winter, however it must be noted that rabbits may breed all year round. As such, to ensure all reasonable efforts have been taken to avoid the entombment/suffering of dependant young, destruction of any warren will take place using initially shovels in the intent of flushing out any remaining mobile rabbits or locating any abandoned dependant litters, which will be humanely despatched by the pest controller. The warren will be immediately destroyed via ripping by digger bucket to prevent re-occupation. Should an evening elapse between evacuation and ripping out, the process must be repeated as rabbits may return. **Ecological Clerk of Works** The specialist pest controller will act as EcoW during any rabbit evacuation/warren ripping operation, in direct liaison and instruction from the qualified ecologist, who will complete a toolbox talk to the pest controller, which will in turn be relayed to any contractors immediately prior to works to ensure works proceed in a manner aligned with the goals detailed within the CEMP.

Lighting Strategy

The habitats on site have high habitat value for commuting and foraging bats and other nocturnal wildlife within what is at present a dark area.

Additional lighting could impact behaviour of wildlife and adversely affect the integrity of roosting and foraging resources. Any proposed external lighting will be installed in accordance with current guidance issued by the Bat Conservation Trust and Institute of Lighting Professionals: Guidance Note 08/18: Bats and Artificial lighting in the UK (BCT & ILP 2018).

The below strategy utilises light prescriptions detailed within this guidance to limit impacts of artificial lighting on bats and other light sensitive species using retained habitats on and directly adjacent to the site including badgers and hedgehogs.

In particular, the lighting strategy seeks to influence the lighting design so that impacts can be avoided to key habitats of value including:

- The adjacent woodland, site boundaries.
- Retained habitats on and directly adjacent to the site.

The following lighting design prescriptions are considered suitable for the type and scale of the Development to minimise the impacts of artificial lighting on site or within the public realm on bats and other light sensitive species.

Lighting design prescriptions recommended for the Site comprise:

- The adjacent woodland and site boundaries must not be illuminated to ensure the present dark zones are retained.
- Reducing the operating time of any installed public realm lighting and levels of illuminance provided via: Part-night operation. Turning off lights between certain hours, for example between midnight and 06:00.
- The use of motion sensors will be avoided to ensure no unnecessary light spill occurs during night-time hours. Where the use of motion sensors cannot be avoided, lights must be set to be turned on for no longer than 1 minute.
- Wall lights and security lights will be ‘dimmable’ and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on.

- Avoiding light spill via: The use of directional lighting by using luminaires with rear shields and an upwards lighting ratio of zero; and Consideration to the height and spacing between lighting columns where practicable. Examples include stud LED or footpath lighting. There will be no bare bulbs and no light pointing upwards. The spread of light will be kept in line with or below the horizontal. Use low-level lighting in conjunction with hoods, cowls, louvers and shields.

- Lights will be directional to ensure that light is directed to the intended areas only.

- Light type: Use of lamps that minimise UV emissions or use UV filters to reduce the attractiveness of the lamp to invertebrates. Use high-pressure sodium or LED lamps, ideally warm white as its function as an invertebrate attractant is relatively low.

- The use of landscaping as to block light spill where appropriate.

- Install lighting systems that deliver no greater than a 3lux average illuminance, with a maximum horizontal illuminance of 0.6 uniformity (subject to appropriate maintenance factors).

- Use narrow spectrum light sources to lower the range of species affected by lighting.

- Use light sources that emit minimal ultra-violet light.

- Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue shortwave length content they will be of a warm / neutral colour temperature <4,200 kelvin.

- External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on.

- All lighting on the developed site will make use of the most up to date technology available.

Consideration will be taken for internal lighting as well as external light. Measures in order to reduce light spillage from internal lighting are displayed below in ***Figure 5***

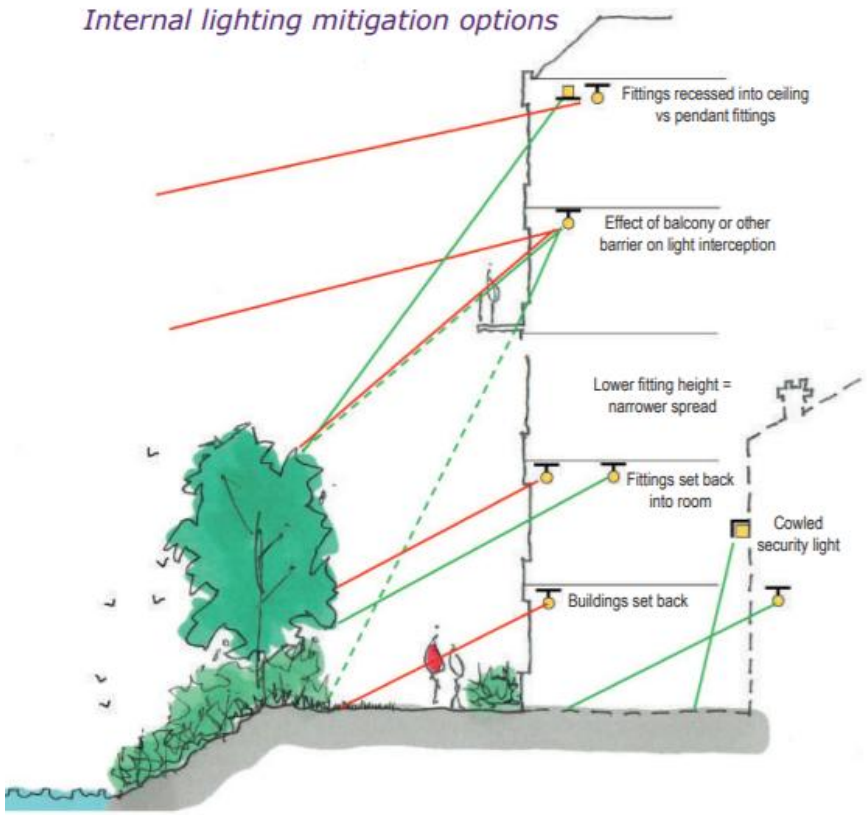


Figure 5- Mitigation measures for internal lighting.

2.0 Habitat Creation and Biodiversity Enhancement Measures

Table 3 details the biodiversity enhancement measures for the site. These are also illustrated in **Appendix 2 for fauna species.**

Ecological/Biodiversity enhancement and management measures	This table includes any measure required to obtain or comply with planning permission, conditions ,or other consent and to comply with legislation.
Bat Boxes	**Overview:** A total of one bat box will be installed on the new dwelling. These will be installed as integrated. These can also be included during construction as intergrade bat boxes within the walls. The proposed locations are shown on the plans provided in **Appendix 2.** Details of the bat boxes recommended for the sites are as follows: ***Integrated bat boxes to be integrated into the façade of new buildings*** • The recommended integrated bat bricks will be constructed of woodcrete/ woodstone. Boxes of this construction are known to require minimal maintenance and have a lifespan of 25 years plus. • 1 No. Integrated Eco Bat Box with Cavity (or similar) (see **Figure 14**) will be installed into the façade of new buildings within the new home. This bat brick type is suitable for integration into a range of building types including brick walls, timber cladding, and stone and are suitable to support a range of species including common pipistrelles *Pipistrellus pipistrellus* and soprano pipistrelles *Pipistrellus pygmaeus* which are likely to be present in the local area. • The bat boxes will be positioned 3-5m above ground level facing a southwest elevation with a clear flight path to and from the entrance, away from artificial light and facing vegetated habitats.

Figure 6: Integrated Eco Bat Box with cavity suitable for a range of crevice dwelling bat species.
(Photo credit: https://www.wildcare.co.uk/integrated-eco-bat-box-cavity.html)

Recommended management:

The proposed bat boxes are designed to require no management or maintenance. Furthermore, preventing physical disturbance of bat boxes will increase the chances of occupation by roosting bats. However, it is recommended that the bat boxes are inspected annually for the first five years outside of the typical active season for bats (May to September inclusive) following installation. Bat boxes must be replaced if they are damaged, removed, or have fallen from their recommended location.

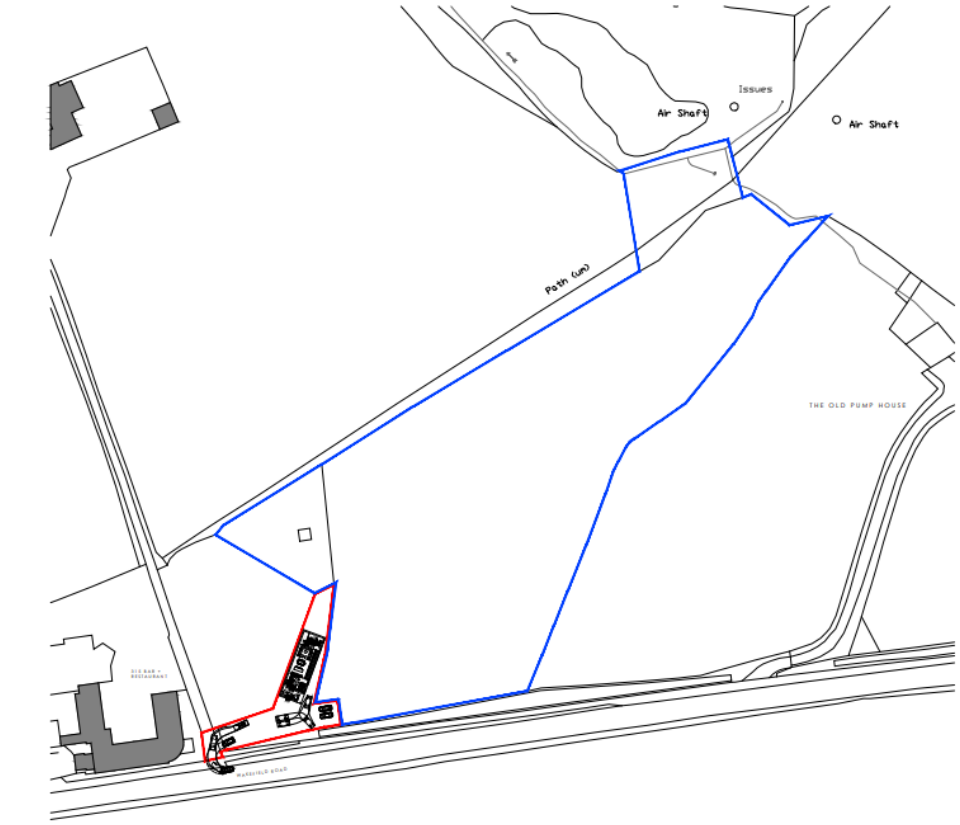
Compliance and Reporting

The CEMP requires stakeholders to comply fully with the pre-construction and construction-related elements of any mitigation strategies agreed with the Local Planning Authority and Natural England under any license requirements. Construction activities will therefore be conducted strictly in accordance with the approved CEMP. Regular inspections and monitoring will be undertaken to ensure compliance with the plan's requirements.

Any deviations or incidents that may affect ecological receptors will be immediately reported to the designated ecologist / Natural England. Updates to the CEMP will be relayed to the Local Planning Authority.

The CEMP will be periodically reviewed and updated as necessary throughout the construction phase to address changing site conditions and evolving ecological considerations.

Appendix 1: Site plan



LOCATION PLAN
AS PROPOSED
Scale 1_500

0 5 10 15 20 25m

SCALE 1:500

Note:
Surrounding contextual buildings and information are based on received ordinance survey drawings and are shown for illustrative purposes only. assumed site boundary is subject to legal confirmation

Note:
Information is based on OS map and received information and is subject to full topographical survey.
Assumed site boundary and site constraints subject to legal confirmation.
All Legal easements and extent of existing underground services locations are subject to confirmation.

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Notes_

PLANNING

N

Rev_ Date_ Amendments_ By_ Apr'd_

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Drawing Status_
PLANNING

Client_
MR + MRS FROUD

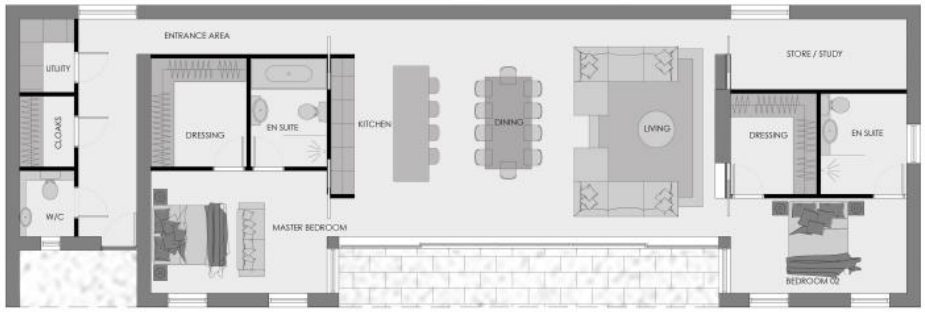
Project_
LAND ADJACENT TO 315 BAR + RESTAURANT_ WAKEFIELD RD_ LEPTON

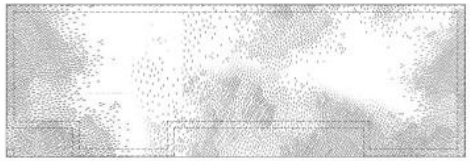
Drawing Title_
AS PROPOSED_ LOCATION PLAN

Drawing Scale_	Drawn By_	Checked By_
1:500	JaL	JaL
Paper Size_	**Drawn Date_**	**Checked Date_**
A3	JULY 2025	JULY 2025

Drawing Number_
24_821 114

Landscape master





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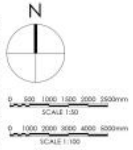

GROUND FLOOR PLAN_
AS PROPOSED
Scale 1:50

ROOF PLAN_
AS PROPOSED
Scale 1:100

Note:
Surrounding contextual buildings and information are based on received ordinance survey drawings and are shown for illustrative purposes only. Assumed site boundary is subject to confirmation to legal confirmation.

Note:
Information is based on OS map and received information and is subject to full topographical survey.
Assumed site boundary and site constraints subject to legal confirmation.
All Legal easements and extent of existing underground services locations are subject to confirmation.

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Drawing Status_
PLANNING

Client_
MR + MRS FROUD

Project_
LAND ADJACENT TO 5 BAR + RESTAURANT, WAKEFIELD ROAD, LEPTON

Drawing Title_
AS PROPOSED_ FLOOR PLANS, ROOF PLAN + ELEVATIONS

Drawing Scale_	Drawn By_	Checked By_
1:50 1:100	AK	AK
Paper Size_	**Drawn Date_**	**Checked Date_**
A1	JULY 2020	JULY 2020

Drawing Number_
24_021 111

Appendix 2: Species specific enhancements.

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Reviewed	1.1	Leo Plevin BSc (Hons), MSc MCIEEM Technical Manager (Ecology)	09/03/2026
Final	2.0	Kayleigh Davies BSc (Hons), MSc, Consultant Ecologist.	10/03/2026