



BIODIVERSE
CONSULTING

CWMANN, LAMPETER

**CONSTRUCTION ECOLOGICAL
MANAGEMENT PLAN**

FOR: LIDL GB LTD

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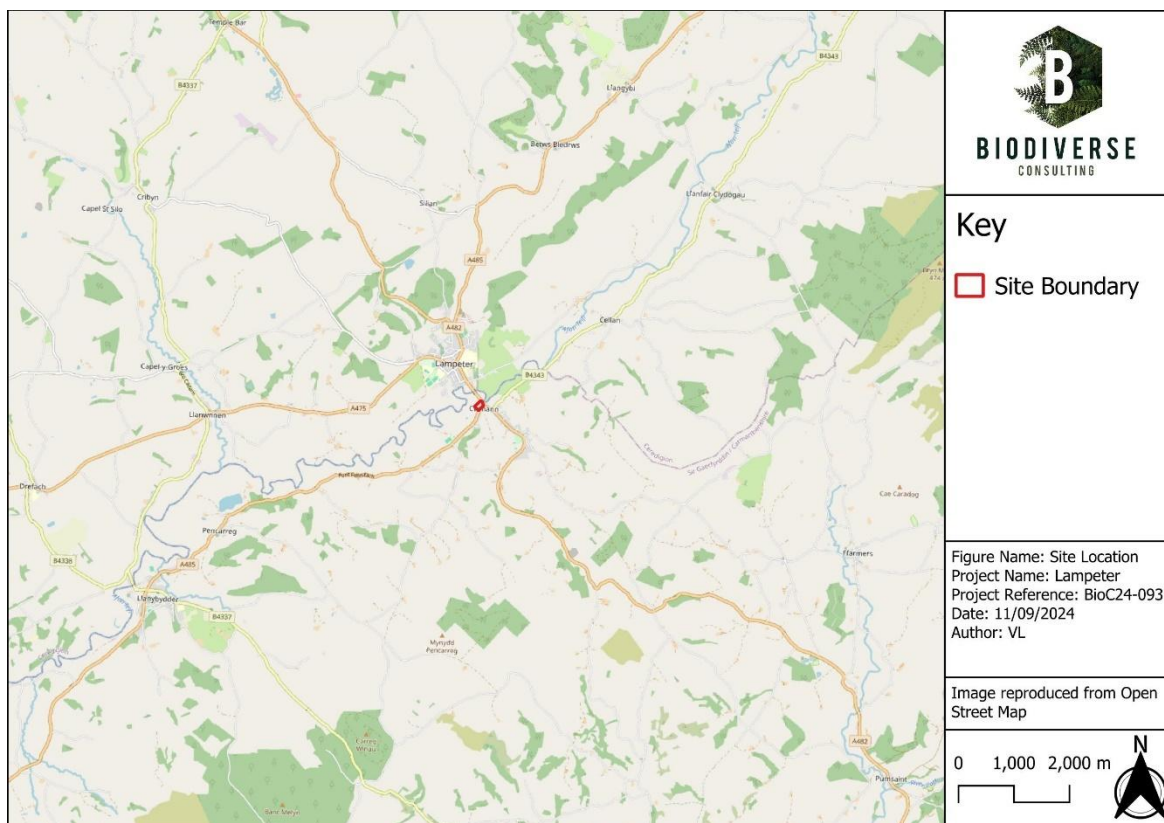
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1 INTRODUCTION

1.1 SITE LOCATION & DESCRIPTION

The Site is located near Pencarreg, Cwmann, Carmarthenshire, SA48 8DR at an approximate central grid reference of SN 58214 47366 as illustrated in Figure 1. The 1.48ha Site currently consists of grassland, mixed scrub, standing water and hardstanding.

FIGURE 1: SITE LOCATION



1.2 PURPOSE

The Construction Ecological Management Plan (CEcMP) aims to ensure that the ecological receptors within the Site are protected during the construction process through avoidance and mitigation measures. This report is based on the findings and assessment presented within the Preliminary Ecological Appraisal (PEA¹) by Biodiverse Consulting Ltd.

¹ Biodiverse Consulting Ltd (2024) Lidl Lampeter Preliminary Ecological Appraisal V1.1



1.3 DEVELOPMENT PROPOSALS

The Site is proposed to be developed into a commercial food store, with associated infrastructure including a hardstanding carpark and landscaping, based on current plans at the date of production of this report (see Figure 2; 3384 P411 Proposed GA Site Plan).

FIGURE 2: DEVELOPMENT PLANS



1.4 ROLES AND RESPONSIBILITIES

It is the responsibility of Lidl GB and their appointed principal contractors and Site representatives, to implement this CEcMP, with the support of a suitably qualified Ecological Clerk of Works (ECOW).



2 LEGISLATION

2.1 THE WILDLIFE & COUNTRYSIDE ACT

The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act (CROW) 2000 and the Natural Environment and Rural Communities Act (NERC) 2006, is the main legislation that protects wildlife in Great Britain and is the mechanism for defining and protecting nationally important Sites of Special Scientific Interest (SSSI). The legislation makes it offence to:

- Intentionally kill, injure or take any wild bird or their eggs or nests (with certain exceptions) and disturb any bird species listed under Schedule 1 to the Act, or its dependent young while it is nesting.
- Intentionally kill, injure or take any wild animal listed under Schedule 5 to the Act (including bats, great crested newt, otter and common toad); intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any wild animal listed under Schedule 5 to the Act; intentionally or recklessly disturb certain Schedule 5 animal species while they occupy a place used for shelter or protection; and
- Pick or uproot any wild plant listed under Schedule 8 of the Act. Schedule 9, Part II of the Act also lists many species for which it is an offence to plant, or otherwise cause to grow, in the wild. Any material containing Japanese knotweed is also identified as controlled waste under the Environmental Protection Act 1990 and must be disposed of properly at licenced landfill according to the Environmental Protection Act (Duty of Care) Regulations 1991.

2.2 THE ENVIRONMENT (WALES) ACT 2016

The Environment (Wales) Act 2016 sets out the requirement for the 'sustainable management of natural resources' together with new ways of working to achieve this. Part 1 of the Environment Act sets out Wales' approach to planning and managing natural resources at a national and local level with a general purpose linked to statutory 'principles of sustainable management of natural resources' defined within the Act. There are 3 main constituents to Part 1 of the Environment Act:

1. The State of Natural Resources Report (SoNaRR)- A report produced by Natural Resources Wales that gives an assessment of natural resources and how well Wales is doing to manage them in a sustainable way
2. Natural Resources Policy - A policy produced by Welsh Government that sets out the priorities, risks and opportunities for managing natural resources sustainably. The policy takes into account the findings of the State of Natural Resources report.



3. Area Statements –A local evidence base produced by Natural Resources Wales which helps to implement the priorities, risks and opportunities identified in the National Policy and how NRW intends to address these²

2.3 THE CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2017

The Conservation of Habitats and Species Regulations 2017 (the ‘Habitat Regulations’), as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, establish the requirements for protecting sites that are internationally important for threatened habitats and species – the National Site Network – and thus the requirement for a ‘Habitat Regulations Assessment’ of plans or developments with potential to affect them.

The Habitat Regulations also establish the strict protection of some species – European Protected Species, including great crested newt and all bats – and make it an offence to deliberately capture, kill or disturb certain wild animals, and to damage or destroy a breeding site or resting place of such an animal (even if the animal is not present at the time).

2.4 NATURAL ENVIRONMENT & RURAL COMMUNITIES (NERC) ACT 2006

The NERC Act 2006 places a duty on local planning authorities to have due regard for biodiversity and nature conservation during their operations and thus ensures that biodiversity is a key consideration in the planning process. The Act also establishes a list of species and habitats of principal importance for the conservation of biodiversity. Such species include brown hare, common toad and hedgehog.

2.5 PROTECTION OF BADGERS ACT 1992

Badgers receive strict protection under the Protection of Badgers Act 1992, which prohibits the taking, injuring, selling, possessing, or killing of badgers and makes it an offence to ill-treat any badger, damage, destroy, disturb, or cause a dog to enter a badger sett.

2.6 REPTILE LEGISLATION

The four widespread species of reptile (common lizard, slow-worm, grass snake and adder) receive partial protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) in respect of Section 9(5). It is an offence to intentionally kill, injure, sell, or to advertise for sale, any of these species.

2.7 BIODIVERSITY ACTION PLAN

The UK Biodiversity Action Plan (UK BAP) was developed to fulfil the Rio Convention on Biological Diversity in 1992, to which the UK is a signatory. The UK Post-2010 Biodiversity Framework

² Wales Biodiversity Partnership (2025) found at : <https://www.biodiversitywales.org.uk/en/legislation-guidance/environment-wales-act/>



succeeded the UKBAP and expired in 2019, but the UKBAP priority species and habitats are retained through the NERC Act 2006. Regional and local BAPs have also been developed for species/habitats of nature conservation importance at regional and local levels.



3 SUMMARY OF ECOLOGICAL FEATURES

The following table summarises the identified ecological receptors and relevant protection measures. The PEA¹ provides further information about the baseline condition of these features.

TABLE 1: SUMMARY OF ECOLOGICAL FEATURES

RECEPTOR	POTENTIAL IMPACT
Habitats (offsite, adjacent hedgerow with trees and dry ditch)	• Destruction or degradation of habitats.
Invasive species Japanese Knotweed	• Possible cross contamination to other areas on and off Site.
Amphibians and Reptiles	• Harm/kill amphibians/reptiles. • Disturbance/destruction of great crested newt (GCN) resting site and/or kill or harm them. • The client will apply to join a District Level Licencing (DLL) scheme for GCN.
Bats	• Disturbance. • Reduction in Site value through increased lighting disturbance. • Loss of habitat.
Birds	• Destruction of, or damage to nests. • Visual and aural disturbance. • Loss of habitat.
Badger	• Kill, injure, or disturb individual badger. • Damage or destroy a badger sett. • Obstruct access or disturb a badger using an area for breeding, resting or shelter.



RECEPTOR	POTENTIAL IMPACT
Otter	• Disturbance/destruction to otter foraging, commuting and resting sites. • Kill, injure or disturb individual otter. • Obstruct access or disturb an otter using an area for foraging or resting.
Water vole	• Destruction of or damage to habitats. • Kill, injure or disturb individual water vole.
Priority species (hedgehog and brown hare)	• Disturbance. • Loss of habitat.
Special Area of Conservation	• Disturbance/degradation of SAC.



4 METHOD STATEMENTS

4.1 INTRODUCTION

The Method Statements (MS) described here are the practical measures and best practice required to avoid or reduce impacts during Site clearance and construction.

4.2 PURPOSE

To ensure that the Site is cleared in a manner that is legally compliant and ecologically sensitive. It should also be noted that the site clearance MS does not include removal or treatment of invasive species, if relevant.

4.2.1 GENERAL AVOIDANCE & MITIGATION PROTOCOLS

The following measures aim to follow best practice in relation to Site clearance works:

1. An ECoW will be appointed to provide advice and supervision before and during construction.
2. The ECoW will have the authority to revise the approach set out in this CEcMP to match prevailing conditions.
3. Site Foreman/lead contractor will be provided with CEcMP prior to commencing works on Site and the details of the appointed ECoW.
4. All contractors will receive a toolbox talk from the ECoW prior to commencing works on Site. The toolbox talk will cover legislation, identification and sensitive working practices.
5. Designated receptor Site to be agreed between site foreman/lead contractor and ECoW for the translocation of priority species (as outlined in Section 3) away from construction Site.
6. All excavations must be closed overnight to avoid trapping any wildlife which may fall in. If closure is not possible the creation of sloping escape ramps will be used which may be achieved by edge profiling at a 45° angle or by using planks large enough for a person to walk up in order to provide animals with an exit route. Any trenches not closed overnight will be checked for protected and notable species each morning prior to the recommencement of works.
7. Any chemicals required during the construction works will be stored in accordance with best practice guidelines. An appropriate locked container will be used when not in use and spill kits will be available on-site at all times (emergency spill kit procedures outlined within Appendix C).
8. A plan will be made for the storage of materials in a designated area away from vegetation to reduce the risk of wildlife taking shelter within materials left on the ground.



9. No fires will be lit.
10. Open pipework with an outside diameter of 150mm or larger will be blocked off at the end of each day to avoid trapping animals within.
11. Attention will be paid to Site hygiene with food and waste disposed of appropriately.

4.3 SENSITIVE VEGETATIVE CLEARANCE MS

The following vegetation clearance methodology is designed to reduce the likelihood of injuring animals such as birds, great crested newt (GCN) and any priority species that may be sheltering within by encouraging them to move off Site.

4.3.1 METHODOLOGY

1. An ECoW will conduct a pre-construction check for nesting birds (within nesting bird season March to August inclusive) and refugia/hibernacula vegetation clearance begins.
2. Under ECoW supervision, a first cut will then be made to a maximum of 15cm with arisings removed from the Site straight away. The Site will be cleared in an east to west direction, allowing species to disperse into retained habitats. The vegetation will then be left for 24 hours to allow for any animals within to move out of the Site. Care and diligence will always be used during any vegetation removal on the Site.
3. After the remaining vegetation has been left for 24hrs, a final cut can be made to ground level.
4. Vegetation should be cleared or maintained at a 0-15cm sward to avoid species from moving back into the Site.

4.4 SILT CONTROL MS

Silt has the potential to harm aquatic plants and animals, as well as reducing overall water quality downstream by transporting contaminants from the Site. It is an offence to allow polluting materials to drain into any watercourses which can result in potential financial penalties and prosecution.

The following silt control measures must be implemented to reduce the likelihood of pollutants negatively impacting the dry drainage ditch during times when it holds water, as well as the River Teifi.

- Avoid works following periods of heavy rainfall to reduce the risk of construction runoff into the channel. Works will be scheduled to periods of low flow (summer – early autumn). Checking Site drainage and silt control interventions after rainfall events and that they are serving the required function. Water discharging from the Site should be checked for silt on a daily basis.



- Always keep a spill kit on the Site and ensure staff are trained in its use and can identify when it is required (Appendix C).
- Strip vegetation only where necessary to reduce bare ground exposure and maintain the large buffer to the west of the Site.
- Install silt fencing where appropriate to prevent small sediments entering the channel and lowering the water quality.
- Plan ahead for disposal of silt and include this in the Site Management Waste Plan.
- Adopt a cautious approach to refuelling and fuel storage. Where machinery needs to be refuelled, this must take place at least 10m from the watercourse to prevent water pollution. Any spills should be immediately reported to the Site manager.

4.5 INVASIVE SPECIES: PLANTS MS

4.5.1 PURPOSE

Japanese knotweed *Reynoutria japonica* was identified on the eastern boundary of the Site (see Appendix A; Target Note 2).

4.5.2 IDENTIFICATION

TABLE 2: JAPANESE KNOTWEED IDENTIFICATION

SPECIES	DESCRIPTION	IDENTIFICATION	SPREAD
Japanese knotweed	• Perennial plant with bamboo-like stems covered in purple speckles that can reach 2-3m high. • Leaves are up to 120mm in length with a flattened base and pointed tip, arranged in a zig-zag pattern on arching stems.	• 	• Cut stem and rhizome fragments can produce a new plant within 10 days. • Spread through watercourses, fly-tipping contaminated garden waste and topsoil • Small fragments are transferred on Site machinery



SPECIES	DESCRIPTION	IDENTIFICATION	SPREAD
	- White-cream flowers which hang in clusters from leaf axils appear in August – October. - In winter orange/brown coloured woody stems remain		

4.5.3 PRE-CONSTRUCTION SURVEY

A pre-construction survey will be required of the proposed Site to identify any changes in species distribution. The infested areas should be mapped out and will inform where controls and treatment methods will need to be implemented.

4.5.4 SITE CONTROLS

Following pre-construction checks, the composition and spread of invasive species on Site will have been identified precisely. These areas will need a range of control measures put in place to prevent there spread. The following measures briefly outline what will be required:

- Following the pre-construction check, infested areas will be fenced off and will remain this way during construction works where possible.
- Access will be restricted to those on foot with cleaning stations for footwear and equipment.
- Installation of dedicated footwear and cleaning stations at the exit of fenced off locations.
- All Site operatives will be provided a toolbox talk on the identification, risks and working methods required to manage invasive species.
- Contaminated soils will be stored in pre-determined storage locations on impermeable surfaces 50m away from any waterbody. All contaminated soils disposed of appropriately.
- If soil is imported for use on Site, the contractor will obtain documentation from the suppliers showing the soil is free of invasive species.
- On Site Risk Assessment Method Statement (RAMS) will include the washing of equipment, footwear and vehicles using disinfectant.



- A ECoW should oversee the Japanese Knotweed management plan.

4.5.5 TREATMENT

The following treatment options would be recommended for the Japanese Knotweed found on Site.

- Unless an area of Japanese Knotweed is likely to have a direct impact on development, it should be controlled in its original location with suitable herbicide over two – five years. Herbicide treatment must be completed by a competent and qualified person with the suitable herbicide for the Site location. The most effective treatment period is July – September inclusive. A lack of regrowth is not evidence that the Japanese Knotweed is no longer alive.
- An ECoW can create and implement a suitable Japanese Knotweed Management plan (KMP) for the Sites individual needs.

4.6 AMPHIBIAN AND REPTILES MS

4.6.1 PURPOSE

The Site offers some opportunity for foraging, commuting, basking and hibernating in the grassland and scrub area for reptiles. In addition, these areas offer potential habitat for amphibians such as GCN during their terrestrial stage.

This MS sets out precautionary measures to avoid/minimise the impact on amphibians and reptiles that have the limited potential to be encountered on Site.

TABLE 3: AMPHIBIAN & REPTILE IDENTIFICATION

SPECIES	IDENTIFICATION	IMAGE
AMPHIBIAN		
Common Toad	• Up to 8-13cm in length with brown to green/grey warty skin. • Moves with a lumbering walk or small hop. • Eggs are laid in strings in a double row. • Dark tadpoles.	



SPECIES	IDENTIFICATION	IMAGE
Common Frog	- Up to 6-9cm in length with olive green to yellow brown smooth skin. Usually spotty or stripy with dark patches behind the eyes. - Eggs are gelatinous with black embryos. - Tadpoles are initially black but turn speckled brown.	
Great Crested Newt	- Up to 15cm in length – largest newt species. - Skin is black/dark brown and has rough warty appearance. Underside is vivid orange/yellow with irregular black spots.	
Smooth Newt	- Up to 10-11cm in length. - Males brown/olive, females light brown. Underside is usually yellow/orange with black spots. - Male has a wavy back crest during the breeding season.	
Palmate Newt	- Up to 7-11cm in length. - Males olive/brown with a ridge along their back, females are yellow/brown. - Eye has a dark stripe running horizontally through it.	
REPTILES		
Adder	- Up to 70cm in length. - Colourations vary – males are grey with black zig-zag markings and females are light brown with dark brown zig-zags. - Juveniles are brick red with visible zig-zag stripes similar to adults.	



SPECIES	IDENTIFICATION	IMAGE
Grass Snake	- Up to 70-120cm in length. - Body colour can vary from bright green/dark olive/brown. - Distinct cream/yellow collar and round pupils.	
Slow Worm	- Up to 50cm in length. - Males are grey/brown and females are brown with dark sides. - Shiny appearance.	
Common lizard	- Up to 15 cm in length including tail. - Usually brown but colour can vary from yellow/green/black.	

4.6.2 AVOIDANCE AND MITIGATION PROTOCOLS

The following avoidance measures will be implemented to prevent impacts on amphibian and reptile species:

- It is not anticipated that the Site supports a notable assemblage of reptiles; however, should multiple reptiles be found during the period of works, a revision MS may be required.
- Records of all amphibian and reptiles encountered on Site should be kept and relevant ECoW will be notified of any encounters.

The following general protection measures will be implemented to reduce the likelihood of amphibians or reptiles being disturbed, killed or injured:

- If an amphibian or reptile is encountered, the ECoW will be contacted with a description or photograph. A suitable course of action will be implemented between the ECoW and Site manager in order to protect the animal. The action taken may vary depending on the species involved, weather conditions and time of year.



4.7 BATS MS

4.7.1 PURPOSE

Habitats within the Site offer limited potential for foraging/roosting bats but hedgerows offer good connectivity to the wider landscape. The overall suitability of the Site is considered low for roosting and foraging bats.

This MS sets out precautionary measures to avoid/minimise the impact on bats and their habitats, including information on field signs to enable Site personnel to identify and take appropriate steps to avoid harm.

4.7.2 BAT IDENTIFICATION AND FIELD SIGNS

Bats are most commonly seen flying at low levels in the summer months at dusk or dawn. The smaller species of bats encountered in the UK are around the size of a matchbox and can fit in very small gaps, around the width of a thumb. They have brown-sandy coloured fur and may be found singly or in large groups within crevices in buildings or trees.

Field signs which indicate the presence of bats include small droppings less than 10mm in length, similar to mouse droppings but, unlike mouse droppings which are hard, bat droppings will crumble if pressed.

4.7.3 AVOIDANCE AND MITIGATION PROTOCOLS

The following avoidance measures will be implemented to prevent the killing, injuring or disturbance to any bats.

- Should any bat be encountered, all works must stop immediately and the ECoW contacted to advise on how best to proceed. Do not handle the bat(s).
- Details of any construction lighting to be conditioned post planning, to prevent potential impacts to bats and other nocturnal species using the Site.
- During construction, minimum lighting will be used. If lighting must be used, and where compatible with Health and Safety requirements, it will be designed to be positioned away from the key commuting areas along the boundaries of the Site and away from areas likely having the most activity (adjacent off-Site grassland and hedgerow with trees). No lighting can be used on the eastern boundary or directed towards the River Teifi to minimise disturbances to wildlife with the Special Area of Conservation (SAC).
- If possible, works will be limited to avoid periods when bats are most active (April – October between the hours of dusk to dawn).



4.8 BIRDS MS

The habitats on Site offer very limited foraging and nesting opportunities for breeding birds within the scrub.

4.8.1 PURPOSE

This MS sets out precautionary measures to avoid/minimise the impact on birds and their habitats, including information on field signs to enable Site personnel to identify and take appropriate steps to avoid harm.

4.8.2 IDENTIFICATION OF NESTS & BREEDING BEHAVIOUR

There are numerous bird species that breed within the UK. Observations of behavioural characteristics during the nesting process is an effective method of identifying a potential breeding bird. These include five stages:

- Courtship/pairing – males will display/sing within a territory to attract females and guard their territory from other member of the same species.
- Nest building – birds that have paired up will begin construction of a nest by repeatedly visiting sheltered areas to gather materials.
- Mating - upon completion of the nest, the pairs will copulate in the early hours of the morning usually over multiple days.
- Egg incubation – birds will anchor themselves down over the nest and eggs. Approaches to coparenting can vary between species, such as, feeding runs and alternate incubation between the male and female.
- Hatching/fledging – typically over several weeks the parent birds will repeatedly visit areas to forage and feed young.

4.8.3 AVOIDANCE & MITIGATION PROTOCOLS

The following methods will be implemented to avoid impacts on birds:

- All Site clearance or ground works taking place between March to August (inclusive) will be preceded by a nesting bird check by the ECoW. The check will take place no more than 48 hours before the commencement of works.
- If nests are present in the works area, the ECoW will advise on suitable precautions, such as exclusion zones within which works will not be permitted until the nest has been confirmed to be vacated.
- If a nesting bird is identified in a works area outside of the core nesting season, the ECoW will be contacted to check the nest and advise on how to proceed.
- Construction activities will be programmed to daytime hours to limit disturbance to roosting bird species.



4.9 BADGER MS

The Site has limited foraging and commuting opportunities and therefore, a precautionary approach will be taken during construction.

4.9.1 PURPOSE

This MS sets out precautionary measures to minimise the impact on this protected species including information on badgers and their field signs to enable Site personnel to identify and take appropriate steps to avoid harm and reduce the likelihood of legal offences being committed.

4.9.2 BADGER IDENTIFICATION & FIELD SIGNS

Badgers are most easily identifiable by the distinct black and white striped head and muzzle (see table 4 image 1). The upper body is covered by long coarse, black-banded, white hairs and their legs and undersides are black. They have small heads, small eyes, a short neck, and a short tail. The average adult length, from head to tail, is approximately 1m with an average weight of 8-14kg. Due to the species elusive nature, it is more likely that field signs are found than the individuals themselves.

4.9.2.1 *Badger Guard Hairs*

Guard hairs are thick hairs that cover the badger's body and give it its black and white colouring. They are white with a silver tip and a dark band approximately 10mm wide just below it. They are extremely distinctive in their structure being around 70mm long, oval in cross section and feel coarse and wiry. The tell-tail, oval shape is evident when the hairs are rolled between fingers and a thumb. The hairs can be found caught on brambles or fences and spoil heaps outside setts.

4.9.2.2 *Badger Bedding*

Badgers will collect masses of vegetation for use as bedding within their setts. Fragments left behind or old discarded bedding may be visible around a sett and can indicate recent usage. Bedding can include a wide range of vegetation including grass, bracken, wood rush, hedge clippings or straw.

4.9.2.3 *Foraging Signs*

Foraging signs are often evident where badgers have been searching for food. 'Snuffle holes' where badgers have inserted their noses into the vegetation in a search for earthworms and scrapes and diggings in the ground can be indications of badger activity.

4.9.2.4 *Latrines and Territory Demarcation*

Badgers dig holes in which they defecate and urinate to mark their territory to other badger clans. They use groups of dung pits called latrines (see table 4 image 2, below) which tend to be



at boundaries such as fences, or the edges of fields and woods. Badgers will occasionally defecate on the ground or on raised surfaces such as walls.

4.9.2.5 *Scratching Posts*

Badgers have sharp claws and powerful front legs used for digging and will leave marks on a 'scratching post' close to setts. They may leave distinctive scratch marks on fallen trees, stone walls or rocks.

4.9.2.6 *Badger Tracks*

Badger paws have five toes and long sharp claws used for digging. Prints are distinctive, usually but not always displaying five toe marks and the claws at the front of the print (see table 4 Image 3, below).

4.9.2.7 *Badger Trails*

Badger trails or paths are created over time as animals move between areas foraging for food. They are faithful to their paths, sticking to the same route which can sometimes follow features such as fences and hedges.

4.9.2.8 *Badger Setts*

A sett is defined in the Protection of Badgers Act 1992 as "any structure or place which displays signs indicating current use by a badger". "Signs indicating current use" is interpreted by the presence of fields signs such as bedding, fresh spoil heaps, recent digging, hair, dung pits, footprints in or around the potential sett, or evidence of badgers entering or exiting the potential sett.

Each badger clan can have more than one sett in its territory, and these setts vary in status and level of use due to social or environmental factors. A sett is usually made up of multiple 'D' shaped entrance holes with the ground around the used entrances free of vegetation, these holes lead to linked tunnels which contain sleeping and nursery chambers. Due to the wording of the legislation, it is important to note that badger setts can include natural holes, voids in rock or spaces under buildings if showing signs of current use.



TABLE 4: BADGER IDENTIFICATION

IMAGE 1: EUROPEAN BADGER	IMAGE 2: LATRINE	IMAGE 3: BADGER PRINTS
		

4.9.3 AVOIDANCE & MITIGATION PROTOCOLS

The following measures will be implemented to prevent unlicensed sett damage/destruction, to prevent the killing or injuring of any badgers, and to reduce disturbance on Site for badgers:

- A pre-construction check including a 50m buffer from the Site (within 4 weeks prior to commencing works) to be carried out by the ECoW to determine badger presence/absence.
- Should setts be identified by an ECoW during the pre-construction check or during any phase of the development, all works must stop and ECoW be contacted. Further surveys and assessment will be required before work can commence in order to determine if a licence is required from Natural England to facilitate further works.
- For the Site clearance phase, works will be avoided, where possible, between sunset and sunrise in order to reduce the risk of disturbance to foraging badgers. After the Site clearance is complete, these time restrictions can be removed as badgers will be less likely to use the Site.

4.10 EUROPEAN OTTER MS

Due to the limited opportunities for foraging, commuting, resting and holt creation the Site is considered to be of negligible value to otter, but a precautionary approach will be taken during construction to avoid impacts on this species.

4.10.1PURPOSE

This MS sets out precautionary measures to avoid/minimise the impact on otter and their habitats, including information on identification and field signs to enable Site personnel to identify and take appropriate steps to avoid harm.



4.10.2 IDENTIFICATION

Otters are about 60-80cm in length and their tails are about 32-56cm. They have brown fur, and their underside is often pale. They have a slender body with small ears on a broad head and a long thick tail (see table 5, image 4).

4.10.3 OTTER FIELD SIGNS

4.10.3.1 Otter Footprints

Footprints can be found in sand and mud alongside rivers. They are five-toed, and their prints are usually 5-7cm in width and 6-9cm in length (see table 5, image 6).

4.10.3.2 Otter Spraint

Otters mark their territory frequently using spraint. Fresh spraint is usually dark green (or strong orange if the otter has eaten crayfish) and will become grey/white as it gets older. It can be found on evident environmental objects both on banks and in the water such as logs and rocks (see table 5 image 5).

TABLE 5: OTTER IDENTIFICATION

IMAGE 4: EUROPEAN OTTER	IMAGE 5: OTTER SPRAINT	IMAGE 6: OTTER PRINTS
		

4.10.4 MITIGATION AND PROTOCOLS

- Pre-construction check for any new holts or resting places that may arise after the original survey within 4 weeks prior to construction starting.
- Protection zones will be established around holts or couches (30m) and natal dens (150m) should they be identified. These protection zones will be clearly marked out before any construction activities commence.
- All contractors will receive a toolbox talk from the ECoW prior to commencing works on Site. This toolbox talk will cover otter protection, legislation, signs to be aware of and specific working practices on Site.



- Should otters be encountered on Site works will stop immediately and, the ECoW be contacted, and the method statement updated if appropriate.

4.11 WATER VOLE MS

4.11.1 PURPOSE

This MS sets out precautionary measures to avoid/minimise the impacts on water vole *Arvicola amphibius* including information on identification and field signs to enable Site personnel to identify and take appropriate steps to avoid harm.

4.11.2 IDENTIFICATION

Water voles reach 14-22cm in length, including their tail. They have brown fur, a blunt rounded nose, small ears and are much larger than other vole species.

4.11.3 FIELD SIGNS

4.11.3.1 Water vole feeding signs

Water voles leave a distinctive 45° angle cut just above the stem of plants that they forage from (see table 6 image 8). They will also leave neat piles of nipped vegetation with sections between 5-10cm in length along pathways.

4.11.3.2 Water vole latrines

Latrines are established from February to October and are left along the bank close to the water edge. Latrines will contain droppings which range in colour from green, brown and black, are 8-12mm long and 4-5mm wide and are odourless. Water vole will re-use latrines so latrines will have flattened mass of old droppings with new ones on top.

4.11.3.3 Water vole burrows and footprints

Burrow entrances are found near the water bank and are usually wider than high, between 4-8cms. Near to burrows, latrines or feeding stations there may be water vole footprints. These footprints are smaller than rats and are star shaped (see table 6 image 9).



TABLE 6: WATER VOLE IDENTIFICATION

IMAGE 7: WATER VOLE	IMAGE 8: WATER VOLE FEEDING SIGNS		IMAGE 9: WATER VOLE PRINTS
	•		• 
			• 

4.11.4 MITIGATION AND PROTOCOL

- Pre-construction check for any latrines, burrows, or feeding sites that may arise after the original survey within 4 weeks prior to construction starting.
- All contractors will receive a toolbox talk from the ECoW prior to commencing works on site. This toolbox talk will cover water vole protection, legislation, signs to be aware of and specific working practices on site.
- Should water vole be encountered on site works will stop immediately and, the ECoW be contacted, and the method statement updated if appropriate.

4.12 HEDGEHOG AND BROWN HARE MS

4.12.1 PURPOSE

This MS sets out precautionary measures to avoid/minimise the impact on hedgehogs *Erinaceus europaeus* and brown hares *Lepus europaeus* including information on identification and field signs to enable Site personnel to identify and take appropriate steps to avoid harm.

4.12.2 HEDGEHOG IDENTIFICATION

The hedgehog is a solitary nocturnal mammal of around 16-20cm in length with most of its body covered by brown and white spines. They are predominantly found in suitable habitats such as hedgerows and woodland.



TABLE 7: HEDGEHOG IDENTIFICATION

IMAGE 10: HEDGEHOG	IMAGE 11: HEDGEHOG DROPPINGS
	
IMAGE 12: HEDGEHOG PRINTS	
	

4.12.3 HEDGEHOG FIELD SIGNS

4.12.3.1 *Hedgehog Footprints*

Footprints can be found in soft ground such as mud. They are five-toed, and their prints are usually 2-3cm in width (see table 7 image 12).

4.12.3.2 *Hedgehog*

In foraging areas excrement can be found. They are approximately 1.5-5cm long and often have a metallic appearance due to the mammal’s diet (see table 7 image 11).



4.12.4 BROWN HARE IDENTIFICATION

TABLE 8: BROWN HARE IDENTIFICATION

IMAGE 13: BROWN HARE	IMAGE 14: BROWN HARE DROPPINGS
	

Brown hares have golden brown fur, a pale underside and long ears with black tips. They are larger in size than rabbits. Brown hares are predominantly found on arable farmland and large, flat expanses of grassland.

4.12.5 BROWN HARE FIELD SIGNS

4.12.5.1 *Brown Hare Footprints*

Footprints can be found in soft ground such as mud. Hind feet are 4.5cm in width and 15cm in length. Fore feet are smaller at 4cm width and 4cm length.

4.12.5.2 *Brown Hare Droppings*

Droppings are spherical approximately 1.5cm – 2cm in diameter with a green/brown colour. Fresh droppings can have a sweet scent (see table 8 image 14).

4.12.6 AVOIDANCE AND MITIGATION PROTOCOLS

The following general protection measures, in addition to measures set out in Section 4.3 will be implemented to reduce the likelihood of hedgehogs or brown hares being killed or injured by the development:

- A high-cut, low-cut method will be used during vegetation clearance as outlined in section 4.3.
- Care and diligence will be used at all times during any vegetation removal on the Site.
- Leverets can be found from March onwards in. If found, they must not be disturbed and ECoW contacted. Grassland sward height can be kept low through brown hare breeding season to prevent leverets being born on Site.



4.13 SPECIAL AREA OF CONSERVATION MS

4.13.1 PURPOSE

This MS sets out precautionary measures to avoid/minimise the impacts on the Afon Teifi/River Teifi Special Area of Conservation (SAC) identified as being 86m from Site. The below table and map (Appendix B) summarise the offsite SAC.

TABLE 9: STATUTORY DESIGNATED SITES

DESIGNATION	SITE NAME	REASON FOR DESIGNATION	DISTANCE FROM SITE
Statutory Designated Sites			
Special Area of Conservation	Afon Teifi / River Teifi	A large river flowing over hard rock. It is mainly mesotrophic with some oligotrophic sections and represents an outstanding example of a sub-type 3 river. Annex 1 Habitats Present: 3130 Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea. Annex 2 species present: • 1096 Brook lamprey • 1099 River lamprey • 1106 Atlantic salmon • 1163 Bullhead • 1355 Otter • 1831 Floating water-plantain	86m
Site of Special Scientific Interest	Afon Teifi / River Teifi	See above.	86m



4.13.2 AVOIDANCE & MITIGATION PROTOCOLS

- All contractors will receive a toolbox talk from ECoW prior to commencing works on Site. This toolbox talk will cover details from the MS relevant to works.
- The Site boundary that borders the SAC will be marked out appropriately with heras fencing and signage indicating the need to exclude access and storage of materials/equipment within these areas.
- A minimum 25m buffer will be applied from the Site and the SAC boundary to minimise disturbance/potential damage to the river.
- All materials to be stored within the Site compound and recyclable/non-recyclable waste areas will be stored on the western boundary of the Site, away from the SAC to minimise disturbance. An ECoW can assist in identifying the best site area to minimise disturbance.
- Provisions must be in place to ensure wastewater from activities such as water suppression and wheel and chassis washing does not run off into the River Teifi and is disposed of correctly.
- During construction, minimum lighting will be used. If lighting must be used, and where compatible with Health and Safety requirements, it will be designed to be positioned away from the SAC with no lighting immediately adjacent the eastern boundary of the Site.
- Washing down facilities must be away from watercourses on the western boundary of the Site and strict control procedures in place to avoid pollution and run-off.
- Best practice must be employed to minimise noise and vibration during construction to minimise disturbance to wildlife within the River Teifi.
- Site roads, particularly the A482 which runs alongside the River Teifi should be kept clear from dust and mud depots. Waste collected from these roads must be collected and removed offsite to prevent waste run-off into the river.
- Any activities regarding oil and chemicals must be performed away from watercourses and strict procedures in place for storage and use to prevent leakage. If any spills occur the emergency spill kit must be utilised (Appendix C) and the Environment Agency and ECoW must be notified immediately.



APPENDICES

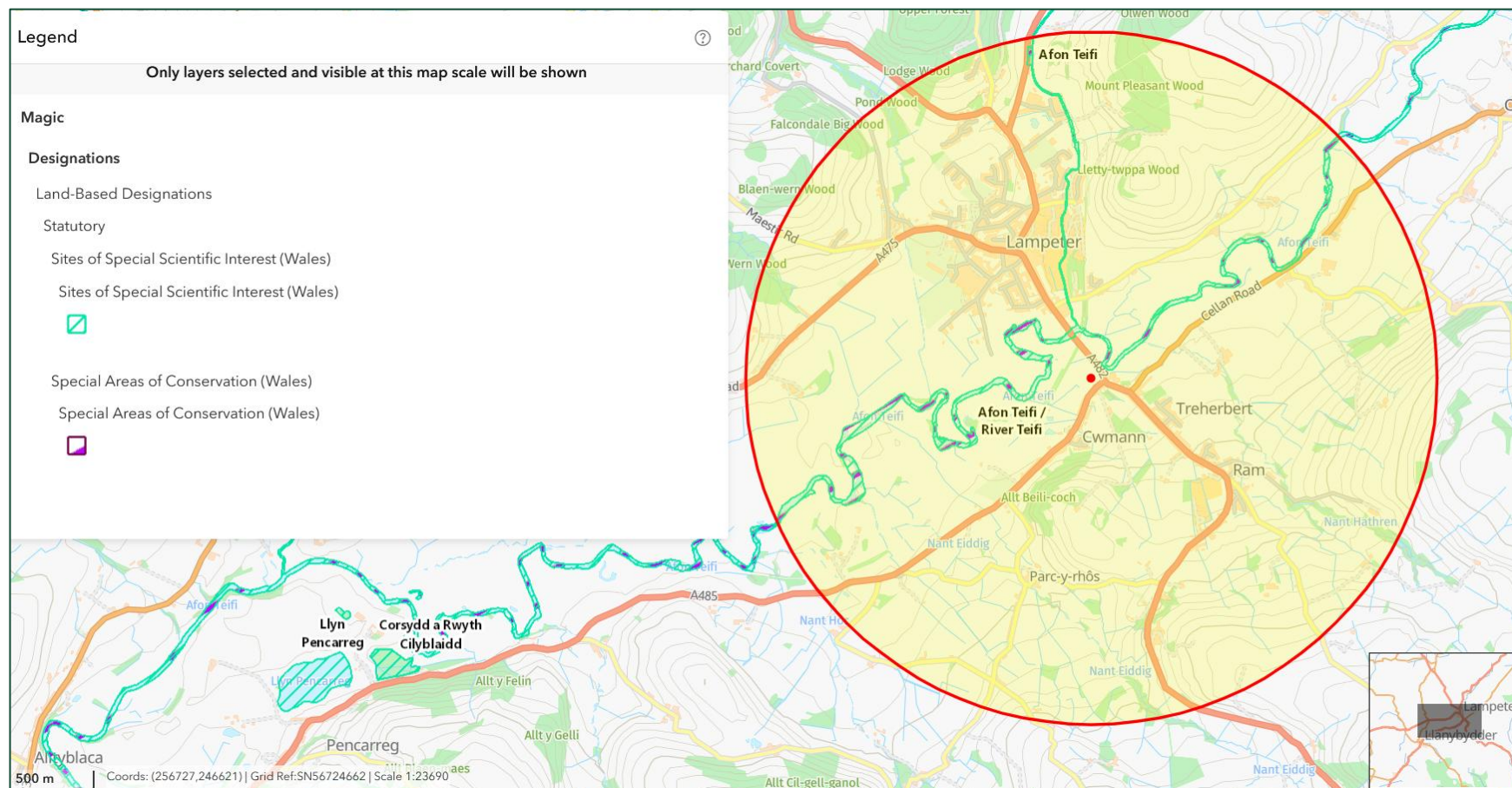


APPENDIX A – UKHAB MAP





APPENDIX B - STATUTORY DESIGNATED SITES MAP



APPENDIX C – EMERGENCY SPILL PROCEDURE³

1. ASSESS THE SITUATION

- **IDENTIFY THE SUBSTANCE:** DETERMINE WHAT CHEMICAL HAS SPILLED BY CHECKING THE LABEL OR SAFETY DATA SHEET (SDS).
- **EVALUATE THE RISK:** ASSESS THE POTENTIAL HAZARDS TO HUMAN HEALTH, SAFETY, AND THE ENVIRONMENT.
- **DETERMINE IF IT'S AN EMERGENCY:** IF THE SPILL IS LARGE, IS IN IMMEDIATE PROXIMITY TO ECOLOGICALLY SENSITIVE AREAS SUCH AS WATERWAYS AND DESIGNATED SITES.

2. PROTECT YOURSELF AND OTHERS

- **PERSONAL PROTECTIVE EQUIPMENT (PPE):** DON THE APPROPRIATE PPE, SUCH AS GLOVES, GOGGLES, AND A LAB COAT OR RESPIRATOR, AS INDICATED BY THE SUBSTANCE'S SDS.
- **EVACUATE:** REMOVE EVERYONE FROM THE IMMEDIATE SPILL VICINITY.
- **SECURE THE AREA:** ESTABLISH A PERIMETER TO PREVENT UNAUTHORIZED ENTRY AND REDUCE RISK OF SPREAD.

3. STOP AND CONTAIN THE SPILL

- **STOP THE SOURCE:**

IF IT IS SAFE TO DO SO, STOP THE SPILL AT ITS SOURCE (E.G., TURN OFF A VALVE).

- **PREVENT SPREAD:**

USE ABSORBENT MATERIALS LIKE SAND, EARTH, OR SPECIALIZED MATS TO BUILD A DIKE AND PREVENT THE SPILL FROM SPREADING.

- **PROTECT DRAINS:**

COVER FLOOR DRAINS AND OTHER ACCESS POINTS TO PREVENT THE SPILL FROM ENTERING SEWERS OR WATERWAYS.

4. NOTIFY THE INCIDENT

- **NOTIFY AUTHORITIES:** IMMEDIATELY REPORT THE SPILL TO YOUR SUPERVISOR, SAFETY OFFICER, AND THE APPROPRIATE EMERGENCY RESPONSE TEAM.
- **PROVIDE DETAILS:** GIVE THEM THE IDENTITY AND QUANTITY OF THE SPILLED MATERIAL, ITS EXACT LOCATION, AND THE STATUS OF INJURIES.

5. CLEAN UP THE SPILL

³ Guidance for Pollution Prevention (2018) Dealing with spills: GPP 22 V1

- **USE CORRECT ABSORBENTS:** APPLY THE APPROPRIATE ABSORBENT MATERIALS FOR THE SPILLED CHEMICAL.
- **COLLECT AND BAG:** SWEEP UP THE ABSORBED MATERIAL AND PLACE IT IN A LEAK-PROOF, LABELED CONTAINER.
- **HANDLE ACIDS AND BASES:** FOR ACIDS AND BASES, YOU MAY NEED TO NEUTRALIZE THEM FIRST BEFORE ABSORBING.

6. DISPOSE OF WASTE

- **FOLLOW REGULATIONS:**

COLLECT ALL CONTAMINATED MATERIALS, INCLUDING USED ABSORBENTS AND PPE, AND DISPOSE OF THEM AS HAZARDOUS WASTE ACCORDING TO LOCAL REGULATIONS.

- **CONTACT A CONTRACTOR:**

FOR LARGE OR COMPLEX SPILLS, YOU MAY NEED TO HIRE A QUALIFIED SPILL CONTRACTOR.

7. REPORT THE INCIDENT

- **COMPLETE REPORTS:** FOLLOW UP WITH REQUIRED INCIDENT REPORTS AND CONTACT THE ENVIRONMENT AGENCY IF THE SPILL WAS IN CONTACT WITH WATERWAYS AND RESTOCK YOUR SPILL KITS.



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