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VIBEROPTIX GB

PROJECT DAFFODIL: GIGABIT PROJECT CUMBRIA

ECOLOGICAL MANAGEMENT PLAN

JANUARY 2025

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VIBEROPTIX GB GB

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ECOLOGICAL MANAGEMENT PLAN

JANUARY 20255

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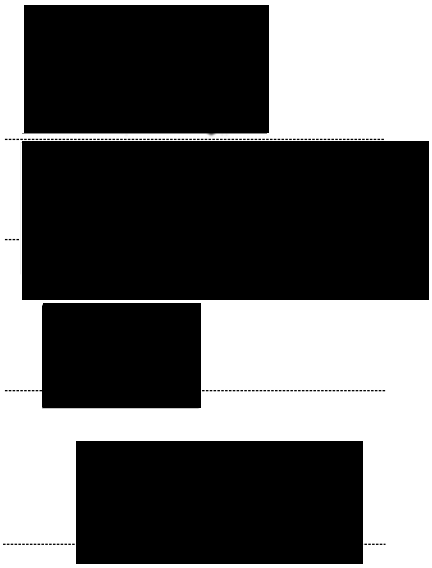

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1 INTRODUCTION

1.1 Background

1.1.1 Wardell Armstrong (WA) were appointed by Viberoptix GB to produce an Ecological Management Plan (EMP) to inform the proposed upgrade of fibre optic cabling infrastructure at numerous sites within the county of Cumbria and Lake District, named 'Project Daffodil'.

1.2 Site Description & Context

1.2.1 The sites consist of a number of networks of overground and underground fibre optic cable infrastructure, and includes ducts, chambers and poles. The works include installing cables within existing infrastructure and upgrading infrastructure by installing new ducts, chambers and poles. These are located within Cumbria as shown within Table 1.

Table 1: OLT details

OLT Reference	OLT Number
OLT02 – Ambleside	OLT02
OLT03 – Appleby-in-Westmorland	OLT03
OLT06 Rural - Aspatria	OLT06 Rural
OLT08 – Brampton	OLT08
OLT09 Rural – Broughton-in-Furness	OLT09 Rural
OLT13 – Cleator Moor	OLT13
OLT14 – Cockermouth	OLT14
OLT15 – Dalston	OLT15
OLT17 – *Name TBC*	OLT17
OLT20 – Flimby	OLT20
OLT21 Rural – Flookburgh	OLT21
OLT22 – Frizington	OLT22
OLT23 Rural - TBC	OLT23 Rural

OLT24 – Gosforth	OLT24
OLT33 – Keswick	OLT33
OLT37 – Longtown	OLT37
OLT44 Rural - Roadhead	OLT44
OLT45 – Scotby	OLT45
OLT51 Rural – St Bees	OLT51 Rural
OLT52 - Staveley	OLT52
OLT54 - Ulverston	OLT54
OLT61 - Windermere	OLT61
OLT 66 - Penrith	OLT66

1.3 Purpose of this Document

1.3.1 The purpose of this EMP is to:

- Provide specified general measures which will protect retained habitats, protected species and potential ecological features on site during the works;
- Identify the responsibilities of involved parties and points of contacts.

1.4 Baseline Information

1.4.1 A high-level desktop assessment for each OLT identified in Table 1 has been, or will be, undertaken. The desktop assessments will provide a review of statutory designated sites, priority habitats, and previously granted protected species surveys. Consultations with Cumbria Biodiversity Data Centre has also been undertaken to identify records of protected and/or protected species within 1km of each OLT.

1.4.2 The client, Viberoptix GB, have also provided the following internal working policies for review:

- PRO_EN_001 Pole Handing and Storage;
- PRO_EN_002 Waste Management and Duty of Care;
- PRO_EN_003 Environmental Spillage;
- PRO_EN_004 Tree Management;
- PRO_EN_005 De-Watering and De-Silting Chambers;
- Construction Materials Management Plan V.01 (2023);
- Environmental and Sustainability Policy; and
- Pollution Prevention Plan V.01 (2023)

2 PROPOSED WORKS

2.1 General Description

2.1.1 The works will involve the installation of new overground and underground fibre optic cables to facilitate fibre internet. This will involve the installation of ducts, chambers and poles. The works will also include installing cabling within existing infrastructure and upgrading infrastructure. The below sections detail each element of the proposed works.

2.2 Poling Works

2.2.1 Poles will be installed to carry cables above ground. Where poles are to be installed this will be undertaken using an auger. The depth of the excavation will be dependent on the pole length and condition of the soil, this will range from 1.2m to 2.4m. Once placed, the holes will be backfilled with spoil and compacted, any excess spoil will be removed and disposed of off-site. Full details can be found in the *Specification for Poling Work Access Network Policy, Document No: ACC/SPC/C001 Fibrus, 2023.*

2.3 Ducting Works

2.3.1 Ducting works include installing cables underground and are used to provide a route from a connection point to the end user. Various types of ducts will be used including twin walled flexible, rigid single wall smooth and flexi-duct.

2.3.2 When trenches are excavated to facilitate the placement of the ducting trees, shrubs, rubbish and other objectionable material may be removed. There must be at least 250mm (footway) or 450mm (carriageway) of soil on top of the ducting therefore the depth of the trench will be dependent on this. Trenches within the carriageway will be firstly cut using an asphalt or concrete cutter. The width of the trench will be determined by the type of ducting used. This will be the minimum width of the duct diameter plus 75mm either side of this, to ensure the duct can be properly compacted.

2.3.3 Where any tree roots are exposed, these will not be cut unless absolutely unavoidable, and no roots over 25mm will be cut without consultation with an Arboricultural Clerk of Works (ACoW) or local authority. Where tree roots are present the ducting will be placed into a specific pipe or placed at least 100mm from any roots.

2.3.4 When backfilling the trenches, excavated material will be used. The material will be compacted in layers. This will be undertaken using a hand tamper until the uppermost ducts are covered by a 75mm layer of padding. The final layer of compaction will be undertaken by a trench rammer to provide a higher density of compaction.

2.3.5 If excavations are to exceed 1.2m the excavation will be protected against trench cave-in by sloping, trench boxes or shoring.

2.3.6 Where ducting is to cross streams, rivers or bridges this will be undertaken using a bespoke design for each crossing.

2.3.7 Full details can be found in *Network Build Ducting Specification Access Network Policy, Fibrus 2023, Document No: ACC/SPC/C006*.

2.4 Concrete Boxing

2.4.1 The concrete boxing will house components where this is connecting to the existing network, where the network transitions from underground to overground or connecting into the existing Openreach network. The concrete boxing will come in four sizes with the size dependent on the number and types of joins to be housed within.

2.4.2 The concrete used will be of grade C35/45 with a water cement ratio of 0.4min. Where concrete is mixed within the site, precautions will be taken to ensure that the ingredients and/or concrete is not allowed to enter gullies, drains or watercourse. The concrete will be set within a mould to cure, and this will then be removed once set.

2.4.3 Material excavated during the placement of the concrete boxing (to ensure it is level and underground services for connecting are visible), will either be used to backfill the excavation or will be removed and disposed of off-site.

2.4.4 Full details can be found within *Specification for Concrete Joint Box Construction Access Network Policy, Fibrus, 2023, Document No: ACC/SPC/C004*.

3 LEGISLATION SUMMARY

3.1 Amphibians

3.1.1 All native amphibians receive legal protection in England arising from the Wildlife and Countryside Act 1981 (as amended).

3.1.2 In England, all amphibians are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and the more threatened species great crested newts *Triturus cristatus* (GCN) and natterjack toad *Epidalea calamita* are also listed on Schedule 2 of the Conservations of Habitats and Species Regulations 2017 (as amended).

3.1.3 Under this legislation, it is an offence to:

- Deliberately capture, injure or kill any wild animal listed as a European Protected Species;
- Deliberately disturb wild animals of any such species in such a way as to be likely to impair their ability:
    a) To survive, to breed or reproduce, or to rear or nurture their young;
    b) In the case of animals of a hibernating or migratory species, to hibernate or migrate;
    c) To significantly affect the local distribution or abundance of the species to which the belong
- Deliberately take or destroy eggs of such an animal; and
- Damage or destroy a breeding site or resting place of such animal.

3.2 Badgers

3.2.1 Badgers and their setts are protected under the Protection of Badgers Act 1992. The legislation aims to protect the species from persecution, rather than being a response to an unfavourable conservation status. As well as protecting the animal itself, the Act also makes the intentional or reckless destruction, damage or obstruction of a badger sett an offence. A sett is defined as "*any structure or place, which displays signs indicating current use by badgers*". In addition, the intentional elimination of sufficient foraging area to support a known social group of badgers, may in certain circumstances, be construed as an offence by constituting the 'cruel ill treatment' of a badger.

3.2.2 Works that damage, destroy or obstruct badgers setts or disturb badgers within their setts are illegal without a licence. Natural England firstly developed guidelines on the type of activity that should be licenced within certain distances of sett entrances in its publication "*Badgers and Development (2002)*". These activities include the use of heavy machinery within 30m of any entrance to an active sett, and lighter machinery within 20m, or light work such as hand digging within 10m, all of which may require a licence. This guidance has been updated in the publications *"Badgers and Development: A Guide to Best Practice and Licensing (2009)"* and "*Best Practice Guidance for Developers, Ecologists and Planners (England) (2023)*" which include a more flexible approach to zoning depending on the activities to be undertaken.

3.3 **Bats**

3.3.1 All UK bat species are listed under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended) whereby legal protection is retained under domestic law. As such bats receive protection under Part 3 of the act, which makes it an offence to :

- Deliberately capture, injure or kill a bat;
- Damage or destroy a breeding site or resting place of a bat.

Under the Regulations, disturbance of bats includes any action which is likely to:

- Impair their ability to survive, breed or reproduce, to rear or nurture their young to hibernate or migrate; and
- Significantly affect the local distribution or abundance of the species in question.

3.3.2 Bat foraging areas and commuting routes are not directly protected under the legislation described above. However, loss of important foraging areas and/or commuting routes could potentially constitute an offence as defined by the Conservation of Habitats and Species Regulations 2017 (as amended) through disturbance affecting bats ability to survive, breed or reproduce, or to rear or nurture their young or hibernate or migrate. Depending on the scheme, this could also extend to significantly affect the local distribution or abundance of the species in question. Furthermore, the loss of a commuting route providing the only access to a roost could also potentially constitute a deliberate, intentional or reckless act of damage/destruction of a breeding site/resting place and damage/destroy/obstruction of a place used for shelter/protection covered by the Conservation of Habitats and

Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended).

3.4 Invasive Non-Native Species

3.4.1 Invasive non-native species (INNS) are listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). For species listed under Schedule 9, it is an offence to plant and/or cause these species to spread into the wild. Therefore, it is not illegal to have these species present within the Site. However, it is if they then spread from the Site following works.

3.4.2 In addition, all waste containing such species comes under control of Part II of the Environmental Protection Act 1990.

3.4.3 Species from Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) that may occur (and not limited to) within the site:

- Japanese Knotweed *Fallopia japonica*
- Himalayan balsam *Impatiens glandulifera*
- Giant hogweed *Heracleum mantegazzianum*
- Cotoneaster species *Cotoneaster horixontalis, Cotoneaster integrifolous, Cotoneaster simonsii* and *Cotoneaster bullatus*
- Varigated yellow archangel *Lamiastrum galeobdolon*
- Montbretia *Crocosmia x crocosmiiflora*
- Rhododendron *Rhododendron ponticum*

3.5 Nesting Birds

3.5.1 All wild birds (as defined by the act) are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it illegal (subject to exceptions) to:

- Intentionally kill, injure, or take any wild bird; and
- Take, damage or destroy the nest (whilst being built or in use) or eggs of any wild bird.

3.5.2 Additional protection is provided to birds listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). In addition to the offence detailed above relating to wild birds, it is illegal to:

- Intentionally or recklessly disturb any bird listed on Schedule 1, or their dependent young while nesting.

3.6 **Mammals (General)**

3.6.1 Hedgehog *Erinaceus europaeus* and brown hare *Lepus europaeus* are protected under the Wildlife and Countryside Act 1981 (as amended) and are listed as Priority Species of Principal Importance, under Section 41 of the Natural Environment and Rural Communities Act 2006 (England).

3.7 **Otter**

3.7.1 Otters are fully protected by their inclusion in Annex II of the Conservation of Habitats and Species regulation 2019 (various amendments) and Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) and it is therefore subject to the provisions of Section 9, which makes it an offence to:

- Intentionally kill, injure, or take an otter [Section 9 (1)];
- Possess or control any live or dead specimen or anything derived from an otter [Section 9(2)];
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by an otter [Section 9(4) (a)];
- Intentionally or recklessly disturb an otter while it is occupying a structure or place which it uses for that purpose [Section 9 (4) (b)];
- Sell, offer for sell, possess or transport for the purpose of sale or publish advertisements to buy or sell an otter.

3.7.2 Otter is a priority species in England and are listed on the UK Post-2010 Biodiversity Framework.

3.8 **Reptiles (Widespread)**

3.8.1 The more widespread species of reptiles (slow worm *Anguis fragilis*, common lizard *Zootoca vivipara*, adder *Vipera berus* and grass snake *Natrix helvetica*) are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) giving them protection against intentional killing injuring and unlicensed trade only. The legislation is applied to all life stages of these animals.

3.8.2 Sand lizards *Lacerta agilis* and smooth snake *Coronella austriaca* are afforded greater protection under the Conservation of Habitats and Species Regulations 2017 (as amended). However, due to their geographical ranges it is not anticipated that these would occur within work sites.

3.9 Red Squirrels

3.9.1 Red squirrels are protected under the Wildlife and Countryside Act 1981 (as amended). They are protected against killing, injuring or taking, damaging, destruction or obstruction of any access to a dray (breeding/resting place) or any other structure in which a red squirrel may use for shelter, and disturbance when occupying a place for shelter or protection.

4 PRECAUTIONARY WORKING METHODS

4.1 General Measures

4.1.1 All materials/chemicals on site should be stored correctly, ideally this should be on areas of current hardstanding and if working near a watercourse/waterbody, at least 10m away from the water. Spill kits should be easily accessible and used when refuelling any machinery or power tools.

4.1.2 When cleaning tools/machinery this should also be done on hardstanding where possible and away from watercourses/waterbodies to avoid pollution and runoff.

4.1.3 The Pollution Prevention Plan (Viberoptix GB, 2023) and Construction Materials Management Plan (Viberoptix GB, 2023) should be followed at all times to avoid contaminating habitats.

4.1.4 All excavations should be covered at the end of the working day to prevent access to wildlife (badgers and general mammals etc), if this is not possible a ramp should be built in or placed into the excavation to provide a means of escape should any wildlife fall in. If any wildlife is discovered within an excavation, the ECoW should be contacted for advice on how to proceed.

4.1.5 All pipes over 100mm in diameter should be capped at night, to prevent animals such as badger or hedgehog from entering.

4.1.6 Nighttime working should be avoided where possible, but if necessary, then light spill should be minimised and lights directed away from boundary vegetation, with the lighting concentrated on the working area only.

4.2 Common Amphibians

4.2.1 The ECoW will provide a toolbox talk to site operatives to ensure they are aware of the potential presence of common amphibians, how to identify them, where they might be found and what they should do if they encounter any common amphibians. Site operatives will be asked to sign the declaration to confirm they have understood.

4.2.2 Where suitable habitats for common amphibians is to be removed, the ECoW will conduct a fingertip search to search for common amphibians immediately prior to removal. The ECoW will then stay to supervise the vegetation which will be undertaken in two-stage cut where the vegetation will be cut down to 15cm. The ECoW will undertake another fingertip search before vegetation is cleared down to

the ground. If any amphibians are encountered during the works, the ECoW will remove them and place them in safe suitable habitat close by.

4.2.3 If a common amphibian is encountered on Site when the ECoW is absent, works must cease and the ECoW must be contacted for advice immediately. If the identity of the common amphibian is not clear, all works must cease until the species has been identified, in case it is a great crested newt (GCN).

4.2.4 If any hibernacula are present within the working area, these will be check by the ECoW. They will then be sensitively deconstructed under supervision of the ECoW and reinstated upon completion of the works. If they cannot be reinstated upon completion of the works, then they were be rebuilt in the nearest suitable location.

4.3 Great Crested Newts

4.3.1 The ECoW will provide a toolbox talk to site operatives to ensure they are aware of the potential presence of GCN, how to identify them, where they might be found, and what they should do if they encounter a GCN.

4.3.2 All vegetation clearance within 250m of a waterbody must be supervised by a licenced ECoW. The ECoW will undertake a fingertip search of the vegetation prior to the works. The ECoW will then stay to supervise the vegetation which will be undertaken in two-stage cut where the vegetation will be cut down to 15cm. The ECoW will undertake another fingertip search before vegetation is cleared down to the ground. If any GCN are encountered during the works, the licenced ECoW will remove them and place them in safe suitable habitat close by.

4.3.3 All log piles or potential hibernacula within the working area or adjacent to the working area must be dissembled by hand under supervision of the ECoW. These will be reassembled at the closest suitable location on completion of the works.

4.3.4 Where works are to take place within 250m of a waterbody, all vehicles and machinery must be parked on areas of hardstanding. If vehicles are required to be on other habitats, the ECoW will check the areas and advise on suitable parking locations.

4.3.5 Storage of materials will be on hardstanding. If materials are to be placed within a vegetated area, then this must be checked beforehand by an ECoW and stored off the ground (i.e. on a pallet).

4.3.6 If GCN are encountered at any point during the works, works must cease and the ECoW contacted for advice.

4.4 Natterjack Toad

4.4.1 Some proposed works located close to the coast in the north/northwest, and south/southwest may have the potential to impact natterjack toad, i.e. works within OLT-45 along Solway Firth cycle route 72, within the Upper Solway Flats and Marshes (SSSI and RAMSAR).

4.4.2 The proposed works in this area should be undertaken outside the natterjack toad breeding season (April to July inclusive), as well as under the supervision of an appropriately licenced ECoW. Where works are undertaken outside of the breeding season but are located in habitats suitable for hibernation, supervision under an appropriately licenced ECoW will be required and potentially a mitigation licence from Natural England may be required (this will be confirmed by the ecologist).

4.4.3 Prior to the commencement of the works in this area, the ECoW should conduct a check for potential natterjack toad burrows. In addition to this, the ECoW should conduct a Site walkover with the Site Supervisor to review the location of the proposed poles and overall working area.

4.4.4 The ECoW will provide a toolbox talk to site operatives to ensure they are aware of the potential presence of natterjack toads, how to identify them, where they might be found, and what they should do if they encounter them.

4.4.5 The ECoW will check for suitable burrows that may be created or used by hibernation toads. All log piles or potential hibernacula within the working area or adjacent to the working area must be dissembled by hand under supervision of the ECoW. These will be reassembled at the closest suitable location on completion of the works.

4.4.6 All vehicles and machinery must be parked on areas of hardstanding. If vehicles are required to be on other habitats, the ECoW will check the areas and advise on suitable parking locations and vehicular access route.

4.4.7 Storage of materials will be on hardstanding. If materials are to be placed within a vegetated area, then this must be checked beforehand by an ECoW and stored off the ground (i.e. on a pallet).

4.4.8 All Site Operatives will adhere to pollution prevention measures so as to not impact the adjacent ditch or nearby ponds. Pollution and biosecurity controls are detailed in Section 5.

4.4.9 If a natterjack toad is encountered at any point during the works, works must cease and the ECoW contacted for advice.

4.5 Badgers

4.5.1 A pre-commencement check by the ECoW should be conducted if the proposed works (in particular new ducting, poles or chambers) are planned within suitable habitats for badger sett creation, such as scrub, hedgerow or grassland. If a badger sett is identified during the works, all works must stop and the ECoW consulted.

4.5.2 General measures listed above will reduce risks for badgers being trapped in pipes and excavations.

4.6 Bats

4.6.1 Works to trees should be avoided. If possible, the placement of poles and cables should be designed to avoid impacts on trees. Where this is not possible and pruning may be required, the ECoW should be consulted to undertake a Ground Level Roost Assessment (GLTRA) to assess the trees suitability for roosting bats. Additional survey requirements may be required following the result of the GLTRA.

4.6.2 If any bats are encountered during the works, works must cease and the ECoW contacted immediately for advice.

4.6.3 Nighttime working must be avoided. If it is required and any artificial lighting is to be used, this must be directed at the area of works to avoid light spill onto trees and suitable commuting or foraging habitats.

4.7 Invasive Non-Native Species

4.7.1 The ECoW will provide a toolbox talk to the site operatives to ensure they are aware of the potential presence of invasive non-native species, how to identify them, where they might be found and what they should do if they encounter any potential invasive non-native plants. Site operatives will be asked to sign the declaration to confirm they have understood, and a copy of the toolbox talk will be kept on site for reference.

4.7.2 In advance of the works, an ECoW will undertake a walkover of the site to identify any invasive non-native plants. Should any be identified the ECoW will mark up the area and set out a suitable exclusion zone, no site operatives should enter or work within this area.

4.7.3 If works need to be conducted in this area this will be done under supervision of the ECoW, and strict biosecurity protocols must be followed. This would include all materials, tools, equipment, machinery and boots to be disinfected and thoroughly cleaned before leaving the buffer zone to ensure that no plant material or soil is

spread. Any material to be removed from the buffer zone must be treated as contaminated waste and disposed of using the correct procedures. If invasive species are present (depending on the species) then a specific method of works may be required and/or specialist contractor advice may be required (i.e. to remove the invasive species off site).

4.8 Mammals (General)

4.8.1 The ECoW will provide a toolbox talk to site operatives to ensure they are made aware of the potential presence of common mammals, how to identify them, where they may be found, and what they should do if they encounter any. Site operatives will be asked to sign a declaration to ensure they have understood.

4.8.2 Where habitat that is suitable for common mammals such as hedgehogs, brown hair or polecat (hedgerows, scrub and rank grass) an ECoW will undertake a hand search of the area immediately prior to vegetation clearance.

4.8.3 If any common mammals are encountered the ECoW must be contacted immediately for advice. There is potential they can be moved; however injured or sickly animals may need to be taken to a wildlife hospital or rehabilitation centre.

4.8.4 The general measures mentioned above will aid in preventing common mammals from being trapped during works.

4.9 Otter

4.9.1 The ECoW will provide a toolbox talk to site operatives to ensure they are made aware of the potential presence of otter, how to identify them, where they may be found, and what they should do if they encounter any. Site operatives will be asked to sign a declaration to ensure they have understood.

4.9.2 Where works are located within 15m of a watercourse, a walkover by an ECoW will be required to check for the evidence of otter within and adjacent to the working area, as well as upstream and downstream of the watercourse.

4.9.3 Any refuelling of machinery must be at least 10m away from any waterbody or watercourse and spill kits must be available.

4.9.4 Any excavations which could cause animals to be trapped will have egress points installed such as sloped edges and/or ramps.

4.9.5 In the unlikely event that an otter holt or a live/dead otter is found at any time during the works, all works in that area will cease immediately and working methods/locations will be reviewed and amended to follow ecological advice. Failure to follow ecological advice may result in an offence being committed.

4.10 **Nesting Birds**

4.10.1 Vegetation clearance works should be timed outside of the nesting bird period (March to August inclusive) if this is not possible the following will be required:

4.10.2 The ECoW will provide a toolbox talk to the site operatives to ensure they are aware of the potential presence of nesting birds, how to identify nesting birds/active nests (including ground nesting species), where they might be found and what they should do if they encounter nesting birds. Site operatives will be asked to sign the declaration to confirm they have understood.

4.10.3 The ECoW will undertake a nesting bird check on any suitable vegetation to be impacted by the proposed works. This will include habitats such as grasslands or heathlands where ground nesting birds are likely to be found as well as scrub and trees/woodland where above ground nesting birds are likely to be found. No vegetation may be cleared until this check is undertaken. This check, which must be undertaken within 48hours prior to clearance, includes watching and listening for signs of bird activity and searching for nests within vegetation.

4.10.4 Should an active nest be identified then no works will occur within a suitable buffer (dependent on species and type of disturbance; buffer to be determined by the ECoW). Such a buffer is typically 5m minimum, which is to remain in place until the nesting attempt is complete, and any chicks have fledged, which will be determined by the ECoW.

4.11 **Red Squirrel**

4.11.1 Prior to any tree works such as removal or pruning, the ECoW will undertake a check for squirrel dreys prior to the commencement of works. Should a squirrel drey be identified a suitable buffer will be established and no worked to occur until young have left the drey, which will be monitored and determined by the ECoW. If works inside the buffer cannot be delayed, then consultation will be required with Natural England to agree in a safe method of working.

4.12 Reptiles

4.12.1 The ECoW will provide a toolbox talk to the site operatives to ensure they are aware of the potential presence of common reptiles, how to identify them, where they might be found and what they should do if they encounter reptiles. Site operatives will be asked to sign the declaration to confirm they have understood.

4.12.2 All vegetation clearance within suitable habitats for reptiles must be supervised by the ECoW. The ECoW will undertake a fingertip search of the vegetation prior to the works. The ECoW will then stay to supervise the vegetation which will be undertaken in two-stage cut where the vegetation will be cut down to 15cm. The ECoW will undertake another fingertip search before vegetation is cleared down to the ground. If any reptiles are encountered during the works, the ECoW will remove them and place them in safe suitable habitat close by.

4.12.3 All log piles or potential hibernacula within suitable habitats for reptiles must be dissembled by hand under supervision of the ECoW. These will be reassembled at the closest suitable location on completion of the works.

4.12.4 Where works are to take place within suitable habitats for reptiles, all vehicles and machinery is to be parked on areas of hardstanding. If vehicles are required to be on other habitats, the ECoW will check the areas and will advise on suitable parking locations.

4.12.5 Storage of materials will be on hardstanding, without prior approval to be placed elsewhere from the ECoW. If materials are to be placed within a vegetated area, then this must be checked beforehand by an ECoW and stored off the ground (i.e. on a pallet).

4.12.6 If a reptile is encountered at any point during the works, the ECoW contacted for advice.

4.13 Designated Sites

4.13.1 The general measures mentioned above along with measures specified in the below habitats section should be followed to prevent damage to designated sites. The locations of designated sites for each OLT are provided in relevant OLT desktop assessment. Where internationally designated sites have been identified, a Habitat Regulations Assessment has been undertaken, this document should be referred to for specific mitigation in regard to protecting the designated site.

4.14 Habitats

Woodland and Hedgerows

4.14.1 Works regarding trees and hedgerows will be undertaken in line with guidance stated in *British Standards 5837:2012 Trees in relation to design, demolition and construction.* Excavations near trees will be avoided where possible to avoid impacts to rooting systems which may prevent or limit growth. Where excavations are required in the immediate vicinity these will be conducted by hand and any roots over 25mm will not be cut without prior approval.

4.14.2 Storage of material (including soil and rubble) mixing of materials and chemicals, excavations, and movement/parking of vehicles and plants will be excluded from tree or hedgerow boundaries. Root protection zones in the form of a barrier will be implemented where appropriate during the works to avoid damage to trees, woodland, and hedgerows.

4.14.3 Arboricultural advice should also be sought regarding trees and woodland.

Grassland

4.14.4 Vegetation clearance of grasslands will be avoided where possible. Where vegetation clearance of grasslands is considered necessary, the minimum amount of clearance possible will be undertaken to prevent sediment run off and impacts to any protected/notable species presence.

4.14.5 Where excavations are to be undertaken within grasslands, the first scrape should be removed and set aside so it can be transplanted back over the excavation once works are complete.

4.14.6 Parking and movement of vehicles and plants within grassland should be avoided where possible, the ECoW should be consulted prior to this. If wet grassland is to be traversed, boards/track matting should be used to distribute the weight and prevent/minimise damage to the grassland.

Waterbodies and watercourses

4.14.7 No working or storage of materials should be undertaken in the immediate vicinity of waterbodies or watercourses. Buffers for waterbodies and watercourses will be identified unless it cannot be avoided. Pollution prevention measures will be implemented to prevent any polluted water or sediment from leaving site and running into waterbodies or watercourses. No refuelling or refilling of plant or materials will be undertaken within 10m of a waterbody or watercourse. Works should also follow measures detailed in the Viberoptix policies Pollution Prevention Plan (Viberoptix GB, 2023) and Construction Materials Management Plan (Viberoptix GB, 2023).

5 POLLUTION AND BIOSECURITY CONTROLS

5.1 Controls

5.1.1 The responsibility for adhering to procedures designed to avoid pollution incidents lies with the Site Supervisor/Team Lead. The main procedures encompass the following:

- An incident response plan should be put in place and communicated to personnel, who will be trained to act in accordance with it, in the event of a pollution incident.
- In the unlikely event of a pollution incident, the Environment Agency should be informed via 0800 807 060, and appropriate action must be taken to reduce/contain the incident.
- Storage tanks will be labelled clearly with contents and storage capacity.
- Fuel, oil, and hazardous materials will be stored in accordance with best practice, including storage on an impervious base within bunded containers of sufficient capacity, above flood water level, with clear signage indicating maximum volume to be stored, and away from any root protection zones.
- Regular checks will be carried out to ensure bund containers are intact and not leaking.
- All tanks, drums, and bowsers will be stored in a secure Site compound when not in use.
- Plant/power tools to be refuelled in the Site compound in a designated area, on an impermeable base, using a bunded bowser with drip trays and spill kit to be provided. They could be refuelled within the working area, if there is no Site compound, using spill containment kits and drip trays.
- Washing out of concrete batching plant, machinery or lorries will be contained, and not located within 10m of a waterbody or watercourse.
- Wash water will be collected for discharge to the sewage system (with the permission from the sewage undertaker), or disposal off Site. Wash water must not be allowed to be discharged into waterbodies or watercourses.
- All machinery and tools will be checked before use and washed prior to use if excessively dirty or is covered with plant materials.

6 ROLES AND RESPONSIILTIES

6.1 Ecological Clerk of Works

6.1.1 The Ecological Clerk of Works (ECoW) is responsible for briefing the Site Operatives on the risks and precautionary working methods detailed within this report. The ECoW will identify any risks present on site and advise on compliance with UK wildlife legislation, undertake checks for presence of protected species and invasive species, advise on the best course of action, and implement any necessary buffer zones.

6.1.2 Should the ECoW identify any ecological constraints during the works, they will liaise with the Site Supervisor/Team Lead to communicate the issues and advise on how to proceed. The ECoW will also be present on site to supervise any works that pose a risk of harm to the protected species identified.

6.2 Site Supervisor/Team Lead

6.2.1 The Site Supervisor/Team Lead is responsible for ensuring that clearance and construction activities are carried out in accordance with the relevant precautionary measures outlined within this report. The Site Supervisor/Team Lead will inform the ECoW of any issues of concern relating to wildlife such as observations of animals on site. The Site Supervisor/Team Lead will maintain a record of any such communication.

6.3 Site Operatives

6.3.1 The site operatives will undertake their work in accordance with the relevant precautionary working methods detailed within this report and under supervision of an ECoW where applicable. Site operatives will receive a Toolbox Talk from the ECoW prior to commencing work and are required to sign to confirm they understood and agree with the methods stated within the document. Should a site operative identify any ecological issues during work, they will stop works in that area and report it to the Site Supervisor/Team Lead who will discuss with the ECoW on how best to proceed.

APPENDICES

Appendix 1 – Amphibians

ECOLOGY
TOOLBOX TALK

Amphibians

General Information

There are 5 species of amphibians within the UK; great crested newt (GCN) *Triturus cristatus* (which is fully protected), smooth newt *Lissotriton vulgaris*, palmate newt *Lissotriton helvetica,* common toad *Bufo Bufo* and common frog *Rana temporaria*. They are often found living side-by-side and found across a range of rural, urban and suburban locations.

Background Ecology

They are generally found in and around waterbodies (including temporary pools). On land, they are found in grass, scrub and woodland habitats as well as under logs and stones within 500 m of a waterbody.

Frog spawn can be identified as clumps of eggs within a pond and toad spawn is laid in strings, whereas newt eggs are laid individually on plant leaves. Young amphibians remain in the water as tadpoles or larvae until they are large enough to move onto land.

Waterbodies have the highest numbers of amphibians in the spring, when they are used for breeding, but can contain lower numbers throughout the year. The habitats surrounding the waterbodies have the highest numbers during summer and autumn where they move between ponds and find suitable places for hibernation during winter.

How to Identify

Great crested newt – up to 17cm long and are black or dark brown, their skin is warty, orange bellies with black spots. Males have a jagged crest along the back and the tail has a silver stripe along it. Females have a bright orange stripe along the bottom of their tail.

Smooth Newt – up to 10cm long and shades of grey or brown, with a yellow or orange belly, usually with black spots. Males have a wavy crest along their back and can sometimes have a faint silver stripe along their tail. Females have a spotted throat.

Palmate Newt – up to 9cm long and shades of brown, grey or green, with a peachy yellow belly with a few spots. Males have distinctively black webbed rear feet. Females do not have a spotted throat.

ECOLOGY TOOLBOX TALK

Amphibians

What to do if found?

Great crested newt – if a GCN or suspected GCN is found on site so works MUST STOP and advice from an ecologist be sought.

Smooth or palmate newt, frog, toad - In England, disturbance to these species does not require a licence, but all are of conservation concern.

If any smooth/palmate newts, frog or toads are found during works, you must protect them and remove them from the working area. You can simply move them to a safe location away from the works, ideally to a cool, damp, sheltered location, or to a designated mitigation area. Immature and juveniles are particularly hard to spot when supervising works.

Any sheltering places, such as log or rocks piles, must be dismantled by hand and any amphibians moved, before any works can proceed. This must be done with particular care during winter when amphibians are most vulnerable.

Protection and Legislation

GCN are fully protected against killing, capture, injury and disturbance, and the places they use for shelter or protection are protected against damage, destruction or obstruction. GCN are listed on Appendix II of the Bern Convention, on Annexes II and IV of the EU Natural Habitats Directive, Schedule 2 of the Conservation of Habitats and Species Regulations 2019 and under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

Smooth and palmate newts, frogs and toads are protected under the Wildlife and Countryside Act 1981 (as amended).

As a result, it is an illegal offence to:

- Intentionally or recklessly kill and injure
- Trade i.e., sale, barter, exchange, transport for sale or advertise for sale or to buy

Common toad are also listed as a Priority Species of Principal Importance, under Section 41 of the Natural Environment and Rural Communities Act 2006 (England), Section 7 of the Environment (Wales) Act 2016, Section 2(4) of the Nature Conservation (Scotland) Act 2004, and Section 3(1) of the Wildlife and Natural Environment Act (Northern Ireland) 2011.

This designates them to be of 'principal importance for the purpose of conserving biodiversity' as those that are most threated, in the greatest decline or where the UK holds a significant portion of the world's total population.

ECOLOGY
TOOLBOX TALK

Common Amphibians

Site	Job Number	Date

The briefing was provided by:

Name	Signature	Company
		Wardell Armstrong

Personnel who received the briefing:

Name	Signature	Company

Appendix 2 – Badgers

ECOLOGY
TOOLBOX TALK

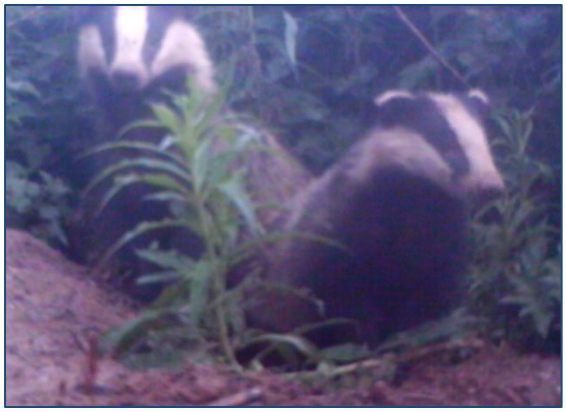
Badgers

Badger Ecology

Badgers are a member of the weasel family and are widespread throughout Britain. They are well known for the black-and-white striped facial mask and characteristic burrowing habits.

Badgers live in underground burrowing systems known as 'setts' visible as single holes or a group of holes. The entrances to the sett often have a mound of soil present and the tunnels are typically the shape of a capital 'D' lying on its straight side.

Badgers live in social groups and can be found in a range of habitats including farmland, woodland, embankments, caves, mines, under buildings and sheds and in the hollow trees.



2 badgers emerging from sett

Why are badgers protected?

The Protection of Badgers Act 1992 (as amended) aims to protect badgers from persecution and deliberate harm or injury.

Badgers are not a species of conservation concern as they are common and widespread in Britain.

Any work that disturbs badgers is illegal without a licence from an appropriate licensing authority.

Main sett at base of mature ash tree

What is an offence?

It is an illegal offence to:

- intentionally capture, kill or injure a badger
- damage, destroy or block access to their setts
- disturb badgers in setts
- treat a badger cruelly
- deliberately send or intentionally allow a dog into a sett
- bait or dig for badgers
- Have in your possession, or sell, a living or deceased badger
- mark or attach a marking device to a badger

Activities that can harm badgers

- ground disturbance near setts
- increased noise, lighting or vibration
- pile driving and quarry blasting
- lighting fires
- using chemicals
- tree felling and timber extraction

Breaking the law can result in unlimited fines and/or imprisonment

ECOLOGY
TOOLBOX TALK

Badgers

Site	Job Number	Date

The briefing was provided by:

Name	Signature	Company
		Wardell Armstrong

Personnel who received the briefing:

Name	Signature	Company

Appendix 3 – Bats

ECOLOGY
TOOLBOX TALK

Bats

Bat Ecology

There are 17 resident species of bat within the UK. Bats are the only flying mammal, with some species being only as long and as wide as a human thumb. They are nocturnal, foraging throughout the night and returning to roost sites for the duration of the day. Bats hibernate throughout the winter months (typically November – March). Bats are able to utilise both natural roost sites (trees, caves etc) or artificial roost sites (buildings, bridges etc). Bats enter roost sites via cavities, holes and cracks.

Where do Bats Roost?

Bats use many different roosting places for resting, breeding and hibernating including:.

- Holes and cracks in trees;
- Roofs and walls;
- Underground in caves;
- railway tunnels and bridges.

Signs that bats are roosting include droppings, dark staining and feeding remains. Bat droppings are dark brown or black and about a centimetre long. As droppings consist mostly of insect remains, they crumble when crushed unlike those of small mammals which are solid and do not crumble.

An example of a tree feature used by roosting bats.

What if a Bat, or Evidence of a Bat Roost is Found?

If a bat, or evidence of bats is found, works should stop immediately, and a Suitably Qualified Licenced Ecologist should be consulted. It is likely that a European Protected Species licence would be required to permit works to continue.

Protection of Bats

All species of bat within the UK are protected under the Wildlife and Countryside Act (1981) as amended, Countryside and Rights of Way Act (2000) and the Conservation of Habitats and Species Regulations (2019) as ammended.

As a result, it is an illegal offence to:

- Intentionally kill, injure or capture bats;
- Deliberately or recklessly disturb bats;
- Damage, destroy or obstruct access to bat roosts;
- Possess or transport a bat or any part of a bat, unless acquired legally;
- Sell, barter or exchange bats or parts of bats, or advertise a wish to do so.

Breaking the law can result in unlimited fines and/or imprisonment

ECOLOGY
TOOLBOX TALK

Bats

Site	Job Number	Date

The briefing was provided by:

Name	Signature	Company
		Wardell Armstrong

Personnel who received the briefing:

Name	Signature	Company

Appendix 4 – Invasive Non-Native Species

ECOLOGY TOOLBOX TALK

Invasive Plants

What are they and how are they recognised?

Some plants are so invasive that they have become a problem, particularly to native UK flora. The species that are most commonly encountered on construction projects are:

Japanese Knotweed

Some plants are so invasive that they have become a problem, particularly to UK native flora. Japanese Knotweed Fallopia japonica is one of the most common invasive plants species and commonly occurs on construction projects. It is prevalent on wasteland, along railways and around waterbodies.

They spread as fragments of root or stem and regenerate into new plants. In spring, it emerges appearing reddish at first and grows rapidly reaching a height of 2-3 metres by the summer.

They are especially prevalent on wasteland, along railways and around water bodies, particularly in Wales and the south-west. It is not harmful to human health in any way.

Giant hogweed

Giant hogweed can grow up to five metres tall and have large umbels of white flowers on top of each stem, resembling a large cow parsley.

They produce as many as 50,000 seeds per plant that remain viable for up to 10 years and are readily dispersed. It can take four years for plants to flower.

It is found in a range of habitats, but appears to favour wastelands, roadsides and waterways. Giant hogweed is of concern because of its sap, that can cause increased photosensitivity and blistering.

ECOLOGY
TOOLBOX TALK

Invasive Plants

Himalayan Balsam

Annual plant that grows to about two metres in height and produces purple-pink orchid-like flowers in June to August.

When mature, seed pods explode when touched and disperse over several metres. Seeds may then be accidentally spread further by humans or carried by water. Himalayan balsam prefers damp habitats and may form dense monocultures along river, stream and ditch banks and in damp woodland.

Vegetation can leave river and stream banks vulnerable to erosion.

Cotoneaster spp.

There are over 100 species of cotoneaster cultivated in the UK, but a small number are considered to be invasive. Including but not exclusive to Hollyberry cotoneaster (Cotoneaster bullatus), small-leaved cotoneaster (Cotoneaster microphyllus) and Himalayan cotoneaster (Cotoneaster horizontalis).

They are evergreen shrubs with shiny leaves. In the spring they will have white or pink flowers, followed by red or orange berries in autumn. It can be difficult to identify cotoneaster to the species level.

Cotoneaster is easily dispersed by birds and once it is established, it can dominate areas – creating dense thickets and outcompeting native flora.

It should be considered that in habitats of lower value (i.e. urban areas), it may actually have a benefit to local ecosystems.

The Legal Situation

The aforementioned plants are listed as Invasive Plant Species under Schedule 9 of the Wildlife and Countryside Act 1981. This makes it an offence to plant or otherwise cause the spread of these species in the wild. They are also a controlled waste and must be disposed of under a suitable licence or at a permitted waste site.

Breaking the law can result in up to £5000 in fines and/or imprisonment. Any vehicles used to commit the offence may be held liable.

ECOLOGY
TOOLBOX TALK

Invasive Plants

Treatment

Chemical methods of control include spraying plants with herbicide. Glyphosate-based herbicides are most commonly used, but must be applied at the appropriate time of year and require several rounds of treatment. Chemical control is best used on Japanese Knotweed.

Physical destruction can also be effective. This involves removing the plant by the root and any young seedlings. It is imperative that plants are removed before seeds are allowed to mature, to prevent accidental dispersal. Any material must be burnt on site, or removed to a licenced landfill as controlled waste.

Precautionary working methods

Areas where invasive plants have been identified will be avoided. Depending on the size of the area, fencing should be erected around the identified areas and signage put in place displaying the identification of the species.

Vegetation clearance will be undertaken under supervision by an Ecological Clerk of Works (ECoW). In the event that invasive species are identified within the works area, works must seize, and advice sought from the supervising ECoW.

ECOLOGY
TOOLBOX TALK

Invasive Plants

Site	Job Number	Date

The briefing was provided by:

Name	Signature	Company
		Wardell Armstrong LLP

Personnel who received the briefing:

Name	Signature	Company

Appendix 5 - Mammals

ECOLOGY
TOOLBOX TALK

Protected Species - Mammals

General Information

There are 11 protected mammal species within the UK; hedgehog, shrew (all species), polecats, water voles, dormice, deer, hares, rabbits, stoats, weasel and moles. The presence of these species does not necessarily limit works, but all mammals in Britain are protected against cruelty and this the destruction of habitat containing adult or young.

Also, killing or trapping of all shrew species, hedgehogs or polecats using certain methods is illegal without a licence.

Background Ecology

Many of these species may be found frequently on construction sites in grass, scrub and woodland and under logs and rocks. Some species are frequently associated with buildings.

Adults of hibernating species will be active during spring and summer. They may be found hibernating during the winter months. Non-hibernating species may be found all year round. Nests containing young may be found between February and October, though some mammals breed all year round.

What to do if found?

Though not specifically protected by law against the effects of development, many of these species are of conservation importance. Some small mammals are highly vulnerable to being injured or killed during vegetation clearance. Where possible care should be taken to protect and remove individuals from danger by following the guidance here:

When using equipment such as strimmers, leave grass height at 10 cm where possible. If this cannot be done, cut in two stages, i.e. leave 15 cm of grass for half a day or more to allow animals to escape, then return and clear to ground level. Avoid areas where the animals occur or remove animals and nests to safety.

Keep watch for nests of young among long grass. Young mammals are typically born blind and without fur and so are particularly vulnerable. Care should be taken at all times of year. Many species breed all year round. Others may be hibernating within grass and scrub. If hibernating animals are found, these should be removed to a safe, dry and well-sheltered place.

Take care!

Common mammals may be found alongside those species such as badgers or dormice that are strictly protected in the UK. Any works that may affect these protected species or places they use for shelter or protection are illegal without a licence. If there is any doubt as to the identity of the species that has been found, do not harm or disturb it or damage or obstruct its habitat and consult a suitably qualified ecologist.

ECOLOGY
TOOLBOX TALK

Protected Species - Mammals

Site	Job Number	Date

The briefing was provided by:

Name	Signature	Company
		Wardell Armstrong

Personnel who received the briefing:

Name	Signature	Company

Appendix 6 – Nesting Birds

ECOLOGY
TOOLBOX TALK

Nesting Birds

The Ecology of Nesting Birds

The nesting bird season is from March to August, when adults will build the nest and then rear their young, until fledging has occurred. Breeding pairs may have two or more broods, dependent on species, weather and food availability.

Additionally, depending on species, nesting can be within a variety of habitats easily leading to disturbance by individuals accidentally. Species type also affects the level of disturbance tolerated, with some species more susceptible.

Nests are often difficult to see. However, if a pair of birds are carrying nesting material and food items, over repeated visits to the same location, this often indicates the presence of a nest. Species such as Robin and Wren can nest in some surprising places, such as in objects within sheds, for example like boxes or plant pots or in low level brash that has been cleared and left.

Collard Dove in an unorthodox place to nest.

Why are nesting birds protected?

To protect species from persecution, and maintain and improve populations, particularly of rarer or endangered species, through the Schedule 1 of the Wildlife and Countryside Act 1981.

What is an offence?

It is an illegal offence to:

- intentionally capture, kill or injure any wild bird
- remove, damage or destroy a wild bird's nest while it's being used or built
- intentionally take or destroy a wild bird's egg
- Disturbance of any species within schedule 1 act.

What if a nesting bird, or nest with eggs is Found?

If a nesting bird(s), or nest with eggs is found, works should be stopped immediately, and an Ecologist should be consulted. It is likely that a protective buffer zone will have to be enforced and works halted till the nesting attempt is completed.

Activities that can harm nesting birds

- removal of vegetation or habitat
- tree felling and timber extraction
- increased noise, lighting or vibration
- ground disturbance near nests
- lighting fires
- pile driving and quarry blasting

Breaking the law can result in unlimited fines and/or imprisonment

ECOLOGY
TOOLBOX TALK

Nesting Birds

Site	Job Number	Date

The briefing was provided by:

Name	Signature	Company
		Wardell Armstrong

Personnel who received the briefing:

Name	Signature	Company

Appendix 7 – Red Squirrel

ECOLOGY TOOLBOX TALK

Red Squirrel

What Are they and how are they recognised?

Red squirrels are up to 24cm long with a bush tail. They have large, round, dark eyes and can often be seen sitting upright on their hind legs holding food with their forelegs while nibbling it.

They are distinguished from grey squirrels (which are not protected) by their bright ginger to red or brown fur and their bushier tail with large ear tufts. Their coat may be flecked with grey in winter.

Red Squirrels are protected by Schedule 5 of the wildlife and Countryside Act 1981.

Where and when are they found?

Red squirrels live in large blocks of woodland, including both coniferous and mixed broadleaved, mainly in northern England with a few isolated populations in central and southern England. They are active during the day but live at low densities and have decreased significantly in numbers since the introduction of the grey squirrel.

One of the most obvious signs of red squirrel is their nests, known as dreys. Dreys are spherical, constructed from twigs and lined with soft hair, moss and dried grass. They are usually located more than six metres above ground, next to the main trunk of the tree in forks, hollows or in branches near the stem at the base of conifer trees. They can also be found in bushes.

They are active all day, year-round, but less so during the winter. They do not hibernate.

What is an offence?

It is an illegal offence to:

- Intentionally or deliberately capture, kill, or injure a red squirrel;
- Intentionally or recklessly damage, destroy, and obstruct access to any structure or place which a red squirrel uses for shelter or protection; and
- Disturb a red squirrel while it is occupying a structure or place which it uses for that purpose.

Activities that can harm red squirrel

- Destruction of habitats such as bramble removal.
- The felling or pruning of trees.
- Ground disturbance near trees with dreys present.
- Disturbance of vegetation near dreys.
- Noise and/or pollution associated with development projects.

What if a red squirrel is found?

If a red squirrel or its nest is found, all works in that area must stop and advice must be sought from a suitably qualified ecologist.

Breaking the law can result in unlimited fines and/or imprisonment. Any vehicles used to commit the offence may be held liable.

ECOLOGY
TOOLBOX TALK

Red Squirrel

Site	Job Number	Date

The briefing was provided by:

Name	Signature	Company
		Wardell Armstrong

Personnel who received the briefing:

Name	Signature	Company

ECOLOGY
TOOLBOX TALK

Red Squirrel

Identification sheet

Commonly Found Species

Adder

Common or Viviparous lizard

Grass snake

Slow worm

ECOLOGY
TOOLBOX TALK

Red Squirrel

Rarer Species

Male and female Sand lizard

Smooth Snake

Appendix 8 – Reptiles

ECOLOGY TOOLBOX TALK

Reptiles

Reptile Ecology

There are four species of reptiles commonly found within the UK; Adder, Common lizard, Grass snake and Slow worm. Rarer species include sand lizard and smooth snake.

These six species live in a variety of habitats such as woodland, scrubland, heathlands, moors and dunes, where they can bask within the open but dart back under cover for protection. They are commonly active from April to September but some variation with weather meaning seeing a reptile species could be from as early as March and as late as October. The rest of the year they hibernate under rocks or similar structures.

Common reptiles are protected by the wildlife and Countryside Act 1981 from injury, killing or sale.

Why are reptiles protected?

Rarer reptiles (sand lizard and smooth snake) are protected from under the Wildlife and Countryside Act 1981 and the European Habitats Directive as an Annex IV species. Therefore, any disturbance on site with these species present is illegal, without an appropriate licence from Natural England.

Reptiles are listed as species of principal importance under the Natural Environment Rural Communities Act 2006; consequently, they must be considered with developments, due to species rarity and low population sizes.

What is an offence?

It is an illegal offence to:

- Intentionally or deliberately capture, kill, or injure any species of reptile;
- Intentionally or recklessly damage, destroy, and disturb sand lizards and smooth lizards, in a place used for shelter or protection, or obstruct access to such areas;
- Possess a reptile, or any part of it, unless acquired lawfully; and
- Sell, barter, exchange, transport, or offer for sale reptile(s) or parts of them.

Activities that can harm reptiles

- Destruction of habitats used by reptiles
- Ground disturbance near breeding, hibernation or basking sites
- Disturbance of vegetation near hibernation or basking sites
- Disturbance of hibernacula (i.e. natural or artificial refuges) used by reptiles
- Noise and/or pollution associated with development projects

What if a reptile is found?

If a reptile is found (or suspected) on site after works have started, and no Natural England licence for impacting works has been granted, all works in the area must stop immediately and expert advice must be sought.

Breaking the law can result in unlimited fines and/or imprisonment. Any vehicles used to commit the offence may be held liable.

ECOLOGY
TOOLBOX TALK

Reptiles

Site	Job Number	Date

The briefing was provided by:

Name	Signature	Company
		Wardell Armstrong

Personnel who received the briefing:

Name	Signature	Company

ECOLOGY
TOOLBOX TALK

Reptiles

Identification sheet

Commonly Found Species

Adder

Common or Viviparous lizard

Grass snake

Slow worm

ECOLOGY
TOOLBOX TALK

Reptiles

Rarer Species

Male and female Sand lizard

Smooth Snake

Appendix 9 – Otter

ECOLOGY
TOOLBOX TALK

Otter

Otter Ecology

Otters are semi-aquatic mammals, with long slender bodies, short legs with webbed paws and a thick tapered tail. The body of an Otter is around 1m in length on average, with a flatted head with a broad muzzle, small eyes and ears. Otters have dark brown fur on their backs with a pale underside.

Otters occur in waterways in both rural and urban areas, utilising waterways such as rivers, canals, lakes, reservoirs, estuaries, coasts, streams, ponds, bogs and marshes. Otters reside in 'holts', which are usually burrows dug into the banks, but can be found in tree roots or old rabbit burrows.

Otters are active all year round and do not hibernate. Due to their nocturnal and cautious nature, sightings of otter are rare. Signs of otter activity within the area include droppings, known as 'spraints', footprints, anal jelly, or worn pathways into the waterways, known as 'slides'.

What if an Otter, or Evidence of an Otter is Found?

If an otter, or evidence of an otter holt/den is found, works should be stopped immediately, and an Ecologist should be consulted. It is likely that a European Protected Species licence would be required to permit works to continue.

Protection of Otter

Otters within the UK are protected under the Wildlife and Countryside Act (1981) as amended and the Conservation of Habitats and Species Regulations (2010) as amended.

Otter are fully protected against killing, capture, injury or disturbance, and any place they use for shelter or protection (such as a holt/den) is also protected from disturbance, damage, obstruction or destruction.

Activities That Can Harm Otter

- ground disturbance on or near to riverbanks
- increased noise or vibration
- removal of vegetation from banks
- using chemicals or pollution of water course
- tree felling and timber extraction on or near riverbanks

Breaking the law can result in unlimited fines and/or imprisonment.

ECOLOGY TOOLBOX TALK

Otter

Site	Job Number	Date

The briefing was provided by:

Name	Signature	Company
		Wardell Armstrong

Personnel who received the briefing:

Name	Signature	Company

Appendix 10 – Natterjack Toad

ECOLOGY
TOOLBOX TALK

Natterjack Toad

General Information

Natterjack toads are extremely rare and occur in the UK on only a small number of sites along the northwestern coast, north Wales coast, along the eastern coast and within the south of England. They can be found living side-by-side by the other UK amphibian species.

How to Identify

They are the UK's loudest amphibian. They have warty skin that is patchy grey brown to dark olive green with a narrow yellow stripe running along the length of its back. Young toadlets also have this stripe. It is slightly smaller than the common toad.

Background Ecology

The natterjack toad lives in coast sand dune systems, coastal grazing marshes and lowland heaths, and occasionally found on upland moor, salt-marshes and disused ironworks. It occurs in shallow and usually temporary ponds but also large ponds or small lakes with shallow margins.

They are found within breeding pools from April – August with tadpoles from May to early September. Toadlets are 7mm in size. Adults and juveniles can be found on land at any time of the year and they hibernate in underground burrows in the ground. The spawn is found as long black strings within the pond.

What to do if found?

They are fully protected against killing, capture, injury and disturbance, including the destruction, damage or obstruction of the places they use for shelter, protection or hibernation.

Works where natterjack toad may be present must be supervised by a licenced ecologist. If a they are found during work, the ecologist must protect them. They will move them to a safe location away from the works, ideally to a cool, damp, sheltered location, or to a designated area. Immature and juveniles are particularly hard to spot when supervising works.

Any sheltering places, such as log piles, must be dismantled by hand and any toads moved, before any works can proceed. This cannot be done in winter.

ECOLOGY
TOOLBOX TALK

Natterjack Toad

Site	Job Number	Date

The briefing was provided by:

Name	Signature	Company
		Wardell Armstrong

Personnel who received the briefing:

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