

A collage of images related to ecology and construction, arranged in a diamond pattern. The images include: a pond with reeds, a yellow and black spotted newt, a bat being held in a gloved hand, a house under construction with scaffolding, a woodchipper being used by workers, a squirrel eating grapes, and a badger.

Ecological Protection and Mitigation Plan

Land to the North West of
Boorley Green (RM3)

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Client:

Miller Homes

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Report	Ecological Protection and Mitigation Plan
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1.0 INTRODUCTION

1.1 Brief

In 2013 an ecological assessment of the site and surrounding area was undertaken by Terence O'Rourke. This information allowed the application to be submitted to Eastleigh Borough Council and go on to achieve outline permission through appeal. Ecosupport Ltd were then commissioned by Miller Homes Ltd and Gleeson Development's Ltd to conduct an updating walkover of the site and subsequent Phase II surveys to support the Reserved Matters application.

This report has been produced to discharge condition 22. This report provides detail on the incorporation of features suitable for use by breeding birds (including Swifts and House Sparrows) and bats, further information on the assessment of the trees on site for bat roosts, a reptile translocation, mitigation management and monitoring plan and timetable of Ecological Protect and Mitigation.

1.2 Aim

The aim of this report is to provide further information into Mitigation, Compensation and Enhancements proposed within Phase 3 of development. It will ensure ecological features within the redline boundary are adequately protected prior to and during development and that once completed, the operational phase will increase opportunities for wildlife.

1.3 Ecological Baseline

1.3.1 Habitats

The following habitats were present during the most recent walkover in May 2021:

Improved Grassland- The dominant habitat on-site was still improved grassland. The grassland appeared to be less intensively managed with a longer sward height and a slightly increased species diversity (Ribwort Plantain (*Plantago lanceolata*) and Dandelion (*Taraxacum officinale*) were also noted this time), however the sward remained dominated by Perennial Ryegrass (*Lolium perenne*) and Clover (*Trifolium* spp) which is indicative of improved grassland.

Hedgerow- The hedgerows were found to be unchanged from the previous survey with all hedgerows undergoing the same level of management. H1 was heavily managed and appeared to be recently flailed creating a gappy appearance. H2 and H3 have remained as an unmanaged native hedgerow and unmanaged mixed hedgerow respectively.

Scrub- Linear Bramble-dominated scrub still runs through the eastern third reserved matters area. This still covers the same extent and indicating continual management.

Scattered Trees- The hedgerows and scrub supported scattered standard trees of mixed species and maturity. All trees identified within the ecological assessment report were still present.

Arable Land- Some of the arable land dominating the second reserved matters area extends into the third reserved matters area. Unlike the previous walkover, the habitat was not supporting arable crops at the time of the survey and was found to be succeeding into grassland. Common early colonisers such as Dandelion, Scentless Mayweed (*Tripleurospermum inodorum*), Common Mouse Ear (*Cerastium fontanum*), Creeping Thistle (*Cirsium arvense*) and Red Dead Nettle (*Lamium purpureum*).

1.3.2 Badgers

A single mammal burrow was identified within the railway habitat along the southern border of the site.

An in-depth inspection of the burrow could not be completed due to the burrow being within the railway boundary, however, fresh digging was seen indicating the burrow is likely in use.

After the completion of 28 days of monitoring using trail cameras, the burrow was discovered to be unused.

1.3.3 Bat Activity

A total of four survey visits were undertaken; one dusk survey per season, with the July survey comprising a dusk/dawn survey. Two transect routes were utilized to ensure all habitat features on site were captured (**Figure 1**). During each survey a pre-determined transect route was walked. The methodology incorporated stations at which surveyors stood stationary to record activity. These were designed to sample the full range of habitats present on site and associated with the site boundaries. The direction travelled was alternated each survey to allow different areas to be surveyed at different times.

Surveys were undertaken by experienced ecologist of Ecosupport Ltd. Bat Box Duet, Bat Scanner and frequency division (Anabat SD1/2) bat detectors were used to determine the species of bats recorded.

Dusk surveys began at sunset and continued for approximately two hours after sunset, and the pre-dawn survey began two hours before sunrise and continued until sunrise. The surveyor walked at a constant speed, recording bat passes and associated details such as species, time and direction of flight wherever possible.

Figure 1. Transect routes 1 & 2.

Table 1 details the dates, timings and conditions of the Phase II Bat Activity Transects.

Table 1. Dates, timings and conditions of Phase II Bat Activity Transects.

Date	Time of Sunset/Sunrise	Start/End Time	Weather Conditions
26/04/17	20:19	20:19/22:19	90% cloud, 9°C Beaufort 0, no rain.
26/07/17	21:00	21:00/23:00	30% cloud, 18°C Beaufort 0, no rain.
27/07/17	05:24	03:54/05:34	75% cloud, 14°C Beaufort 0, no rain.
05/10/17	19:02	19:02/21:02	80% cloud, 13°C Beaufort 0-1.

Activity was dominated by Common Pipistrelle (*Pipistrellus pipistrellus*) with occasional Soprano Pipistrelle (*Pipistrellus pymaeus*) and single registrations of Long-eared (*Plecotus Sp.*) and *Myotis Sp.* The highest levels of activity was recorded along Ford Lake brook. In addition to the species recorded during the activity transects Noctule (*Nyctalus noctula*), Serotine (*Eptesicus serotinus*), Leislars (*Nyctalus leisleri*), Barbastelle (*Barbastella barbastellus*) and Nathusius Pipistrelle (*Pipistrellus nathusii*) although in low numbers, were also recorded. The highest levels of activity were recorded along the central hedgerow and also along Ford Lake.

1.3.4 Roosting Bats

One Elder (*Sambucus nigra*) and three mature Hawthorns (*Crataegus monogyna*) along the central unmanaged grassland strip (**TN1**) are to be removed. An assessment of these was made to determine the likelihood of supporting roosting bats was particular attention paid to those to be removed. This involved using close-focus Avian Trekker binoculars and a high-powered torch to inspect the tree from the ground looking for features indicative of bat roosts. The survey was carried out in accordance with *Bat Surveys for Professional Ecologists; Good Practice Guidelines* 3rd edition published by the Bat Conservation Trust (Collins, 2016). This survey was completed by Tristanna Boxall BSc (Hons) of Ecosupport Ltd in July 2019 and subsequently by Lyndsey McBean BSc (Hons) PG Cert ACIEEM in May 2022.

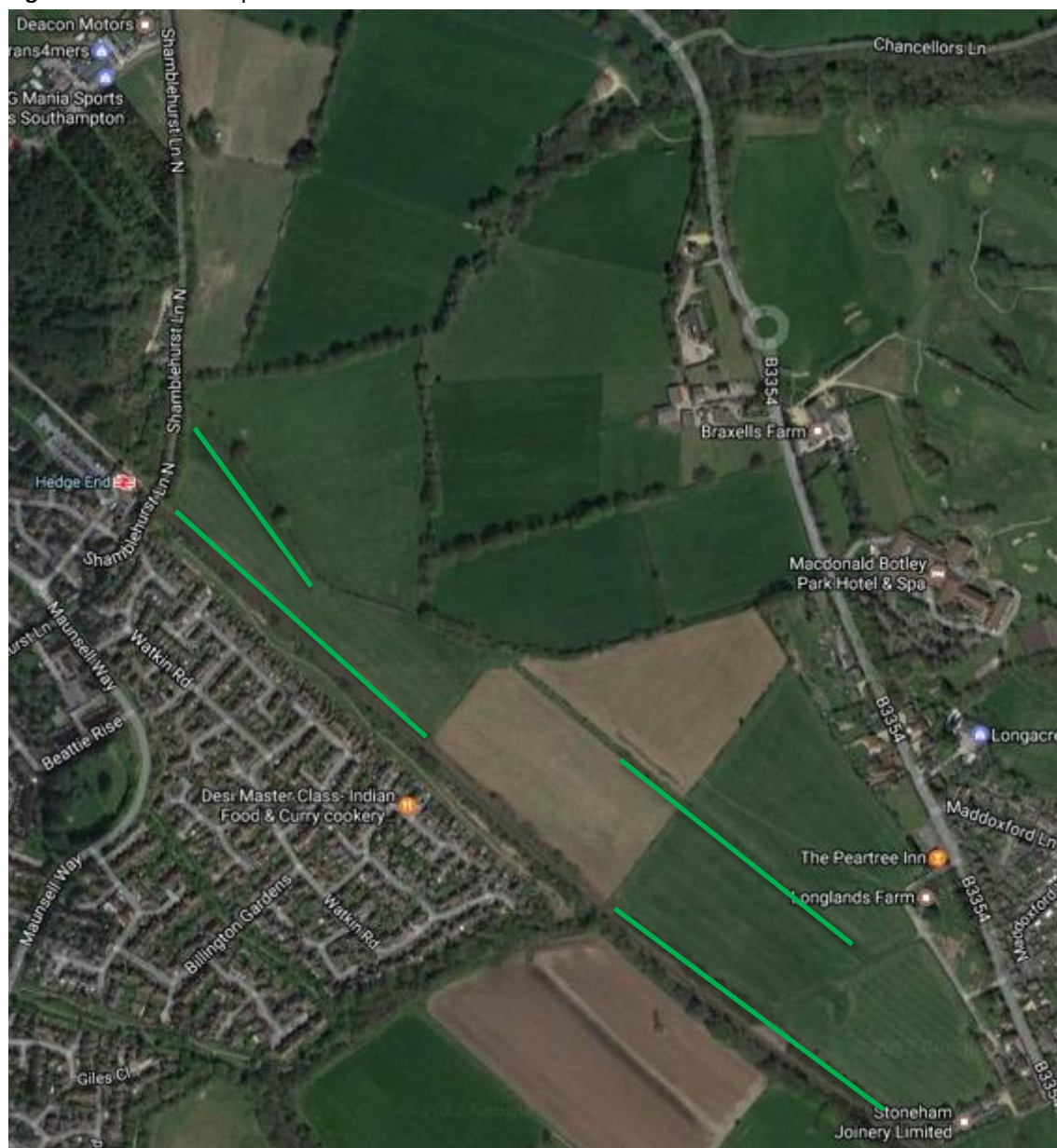
No features considered suitable to support roosting bats were identified on the Elder and three mature Hawthorns (**TN1**).

1.3.5 Reptiles

Areas of grassland, limited to the periphery of the site, were considered favourable reptile habitat. Slow Worms (*Anguis fragilis*), Lizards (*Zootoca vivipara*) and a juvenile Grass Snake (*Natrix natrix*) were all recorded on site however reptiles were restricted to certain areas. **Figure 2** illustrates the location of reptiles within Phase 1. **Table 2** below contains the data from the survey.

Table 2. Reptile Survey Results.

Date	Time	Weather	Reptiles
02/05/2017	13:00	14°C cloudy (90%) with sunny spells.	-
10/05/2017	12:30	15°C 50% cloud	1 FSW
12/05/2017	14:00	15°C Cloudy (100%) with sunny spells.	1 FSW 1 MSW
16/05/2017	11:00	17°C 100% cloud	1 FSW 1 MSW 1 JGS
22/05/2017	09:30	18°C 50% cloud	2 MSW 1 FSW
24/05/2017	13:45	22°C 100% cloud	1 MSW 1L
31/05/2017	10:00	18°C 100% cloud	2 MSW 1FSW

Figure 2. Location of reptiles on site.

1.3.6 Breeding Birds

Twelve species of breeding bird were confirmed breeding within the site. The majority of the breeding bird community is composed of common and widespread species such as Blackbird (*Turdus merula*), Robin (*Erithacus rubecula*), Blue Tit (*Parus caeruleus*) and Chaffinch (*Fringilla coelebs*). All other species recorded were considered to be non-breeding but using the site for feeding, roosting or commuting across the site.

1.3.7 Water Vole and Otter

Within 1km of the site there are confirmed records of both Water Vole and Otter however no evidence of Water Vole was identified during the surveys. A number of footprints, considered likely to belong to an Otter were identified in the western most extent of Ford Lake. A trail camera was deployed in April 2017 and a single recording of an Otter was confirmed on Phase 1 of the development (**Fig 3**), however a buffer is being maintained at this location.

Figure 3. Location of trail camera with 1 commuting Otter observed (red circle).



1.3.8 Dormouse Survey

Previous correspondence with the council's Ecologist highlighted concerns about Dormice in the area. Despite the habitat being considered to be high quality for the species, no Dormice or evidence of Dormice was recorded during the surveys.

Please note, during on-going construction works associated with Phase 2, a Dormouse hibernation nest was discovered. All future works will be completed under a Natural England EPSL. Please see section 2.7 for the Dormouse Mitigation Strategy.

1.3.9 Desk Based Search

There are no designated sites of nature conservation interest within the site. The site lies within 5.6km of designated sites associated with the Solent.

The Solent Maritime SAC and Solent and Southampton SPA, SSSI and Ramsar site lies approximately 2km south of the site. This site qualifies under Article 4.1 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:

- A046a Dark-bellied brent goose (Non-breeding) (*Branta bernicla bernicla*)
- A052 Eurasian teal (Non-breeding) (*Anas crecca*)
- Ringed plover (Non-breeding) (*Charadrius hiaticula*)
- Black-tailed godwit (Non-breeding) (*Limosa limosa islandica*)
- Mediterranean gull (Breeding) (*Larus melanocephalus*)
- Sandwich tern (Breeding) (*Sterna sandvicensis*)
- Roseate tern (Breeding) (*Sterna dougallii*)
- Common tern (Breeding) (*Sterna hirundo*)

- Little tern (Breeding) (*Sterna albifrons*)

The area qualifies under Article 4.2 of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl.

The Solent and Southampton estuaries are also designated as a Ramsar site qualifying under criteria 1, 2, 5 and 6:

Criterion 1 - A wetland of international importance. The site is one of the few major sheltered channels between a substantial island and mainland in European waters, exhibiting an unusual strong double tidal flow and has long periods of slack water at high and low tide. It includes many wetland habitats characteristic of the biogeographic region: saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs.

Criterion 2 – The site supports an important assemblage of rare plants and invertebrates. At least 33 British Red Data Book invertebrates and at least eight British Red Data Book plants are represented on site.

Criterion 5 – Assemblages of international importance – 51,343 waterfowl (5 year peak mean 1998/99-2002/2003).

Criterion 6 – Species/populations occurring at levels of international importance:

- Dark-bellied brent goose 3.0% of the GB population (5 year peak mean 1998/9-2002/3)
- Ringed plover 1.2% of population (5 year peak mean 1998/9-2002/3)
- Eurasian teal 1.3% of population (5 year peak mean 1998/9-2002/3)
- Black-tailed godwit 3.5% of population (5 year peak mean 1998/9-2002/3).

The Solent Maritime SAC lies 2km south of the application site. The following Annex 1 habitats and Annex II species are the primary reason for the selection of this site:

- Sandbanks which are slightly covered by sea water all the time
- Estuaries
- Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats
- Coastal lagoons
- Annual vegetation of drift lines Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves
- Salicornia and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand
- Spartina swards (*Spartinion maritima*); Cord-grass swards
- Atlantic salt meadows (*Glauco -Puccinellietalia maritima*)
- Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); Shifting dunes with marram

- *Vertigo moulinsiana*; Desmoulin's whorl snail

The River Itchen SAC, SSSI lies 3.5km north west of the application site. The following Annex 1 habitats and Annex II species are the primary reason for the selection of this site:

- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche – Batrachion* vegetation; Rivers with floating vegetation often dominated by water-crowfoot
- *Coenagrion mercuriale*; Southern damselfly
- *Austropotamobius pallipes*; White-clawed (or Atlantic stream) crayfish
- *Lampetra planeri*; Brook lamprey
- *Salmo salar*; Atlantic salmon
- *Cottus gobio*; Bullhead
- *Lutra lutra*; Otter

2.0 MITIGATION STRATEGY

2.1 Aims of the Mitigation Strategy

This mitigation strategy details the measures that will be implemented in order to ensure that the proposed development fully complies with legislation and planning policy. The two primary aims of the mitigation strategy are:

- 1) To prevent the killing or injury of protected species as a result of works
- 2) To ensure local conservation status of the species is maintained at a favourable level.

2.2 Reptile Mitigation

2.2.1 Guidance

This reptile mitigation strategy seeks to adhere to best practice wherever possible in order to ensure the best possible outcome for the conservation status of reptiles within the local area. Broad guidance is provided by '*Reptiles: guidelines for developers*' (English Nature, 2004) with greater technical guidance provided by the Highways Agency (2005). The level of effort required during capture operations is governed by the Herpetofauna Groups of Britain and Ireland (HGBI) guidelines (1998).

2.2.2 Receptor Site

Wherever possible, reptiles should be retained on site, or released immediately adjacent to the site. *In-situ* relocation schemes, where reptiles are retained in suitable areas of a development site or released into immediately adjacent habitat are preferable (English Nature, 2004). This will be the case for this development as a section of the site will be retained for the reptiles. The approximate location is demonstrated in **Figure 4** however this is more clearly illustrated in the landscape plans for the site.

Figure 4. Reptiles will be translocated into the buffer that runs parallel to the railway.

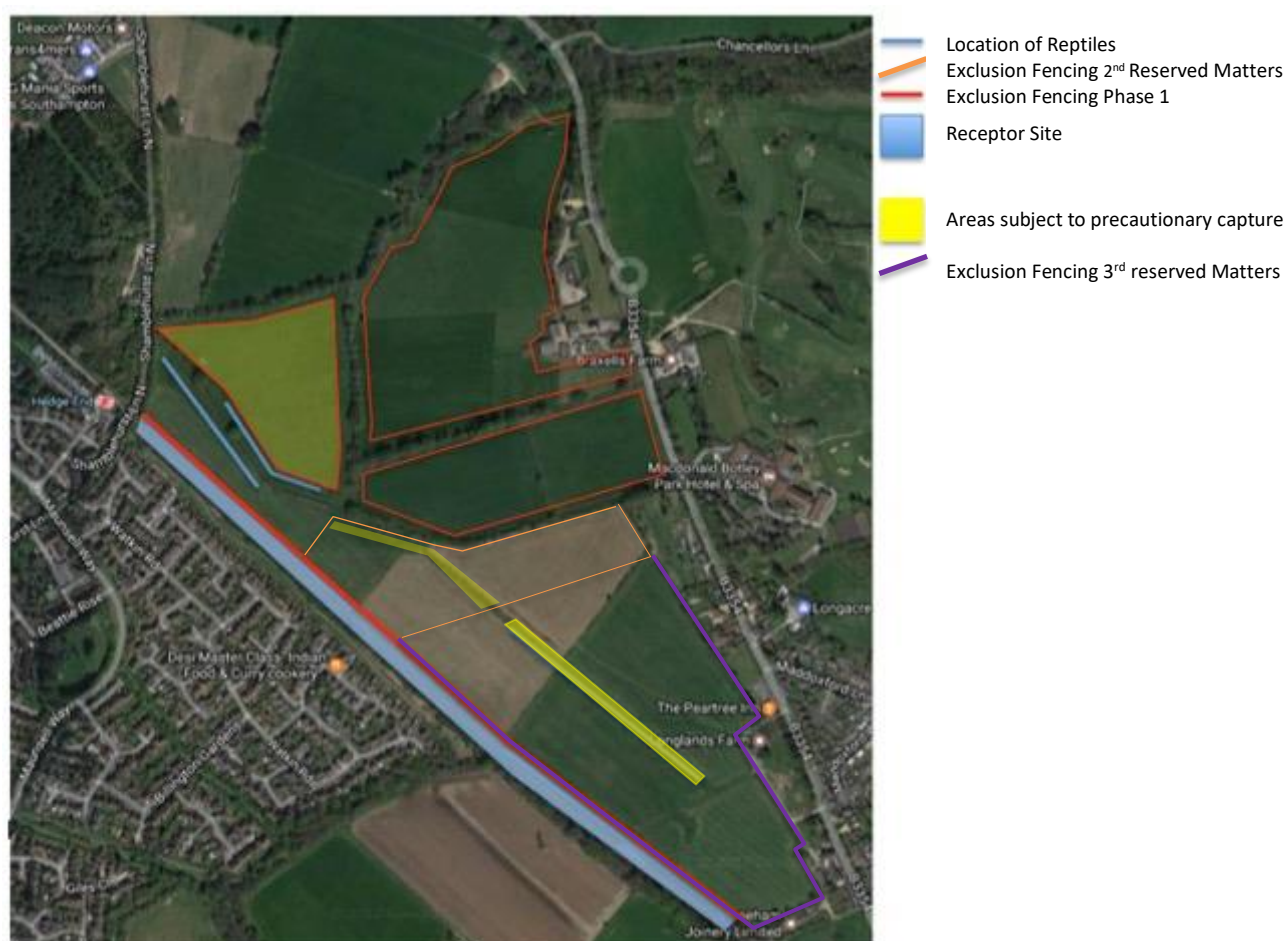


The habitat along the railway already provides high quality reptile habitat (i.e. tussocky grassland, with varied sward height) but it will be enhanced via the introduction of four artificial hibernacula and three log piles. This will provide shelter and hibernation opportunities as well as providing a significant habitat resource for invertebrates (a food resource for reptiles). The design of the hibernacula will follow best practice guidelines (HART, 2009), comprising a mixture of rubble and organic materials with a turf cover.

2.2.3 Reptile Exclusion Fencing

Reptile exclusion fencing will be first installed around the perimeter of the receptor area (**Figure 1**). This will allow the area to further establish in terms of sward structure. Exclusion fencing will be installed around the periphery of the site (**Figure 5**). This will provide a division between the retained buffers and the 'working' areas i.e. those areas where humans and machinery will disturb the ground. This means if there is a lapse in the management, and these areas become suitable for reptiles, they will not be able to make their way on to site. In addition, further fencing will be erected within the center of the site. This will separate the areas containing reptiles from those without reptiles. The fencing will remain in place until all works are completed. The construction team and site manager will be briefed to monitor the reptile fences daily and to report any breaches so that they can be repaired as soon as possible.

Figure 5. Location of Reptile Exclusion Fencing.



2.2.4 Site Set Up

As reptiles are limited in their distribution, artificial refugia will only be distributed throughout the areas containing reptiles (**Figure 3**). The refugia used will be a mixture of bitumen roofing felt and corrugated metal. The density will be increased to facilitate the capturing process and in an attempt to reduce the number of capture days required.

2.2.5 Capture

2.2.5.1 Timing

The optimum period for capture of reptiles is April to June and September, however it is possible to capture reptiles outside of this period providing weather conditions are suitable (i.e. between 10°C and 20°C with little or no wind or rain). By ensuring that all reptiles are translocated by the end of September, it will allow sufficient time for reptiles to find suitable hibernation sites within the receptor site.

2.2.5.2 Catching

Ecologists with experience in reptile capture will carry out the trapping of reptiles during the active reptile season on days where reptiles were likely to be found.

Reptiles will be captured by hand from beneath the artificial refugia and placed into a suitable container. All captured reptiles will be released into the receptor area on the same day they are captured.

2.2.5.3 Capture Effort

In line with the accepted 2014 report the reptile mats will be checked for a minimum of 20 visits. These visits will continue until there have been five consecutive visits clear of capture. The capture effort will not be deemed completed until five consecutive negative days are recorded.

2.2.6 Destructive Search

Once five negative capture visits have been achieved, and prior to development works getting under way, the areas shaded in blue in Figure 3 will be subject to a destructive search. An ecologist will be present when the top soil and vegetation is stripped. This will involve a digger stripping the vegetation and topsoil using a toothed bucket. The ecologist will catch any reptiles and/or small mammals during this time and move them out of harm's way.

2.2.7 Management

The buffer along the railway is made up of two components; newly created Wildflower Grassland to be created through sowing wildflower seed, and Tough/Tussocky Grassland which is already present and established on site. The reptiles will be translocated within the Tussocky Grassland as this is already established and suitable.

The resulting management of this area is detailed within Chapter 12 of the Landscape Strategy put together by ACD. It states "tussocky grassland requires minimal maintenance. To control scrub and Bramble development, tussocky areas are to be cut every 2-3 years between October and February. In the interest of wildlife this cutting is best done on a rotational basis

so that no more than a third of the area is cut in any one year leaving the remainder as an undisturbed refuge” (**Table 2** and **Figure 6** below).

It is considered this is in line with the Management specified within the Reptile Mitigation Strategy: “The long-term aims of the habitat management of the receptor site are to provide a continued diverse habitat in terms of both species and structure. Scrub habitat (particularly bramble) will be allowed to develop, but should not exceed 15% coverage of the site in order to create a structurally diverse habitat with ‘ecotones’ (i.e scrub/grassland interface) with suitable basking and foraging areas for reptiles. This will be achieved by an selective strimming of up to 50% of the grassland, avoiding any scrub (unless scrub cover exceeds 15%)”.

This will be managed by a private management company.

Table 1. Management of tussocky grassland (reptile receptor) over five years.

Year	Management
Year 1	Cut first third of tussocky grassland (October – February)
Year 2	Cut second third of tussocky grassland (October – February)
Year 3	Cut third third of tussocky grassland (October – February)
Year 4	Cut first third of tussocky grassland (October – February)
Year 5	Cut second third of tussocky grassland (October – February)

Figure 6. Example of split of tussocky grassland.



2.2.8 Monitoring

Once all Phases of development are complete a monitoring survey of the receptor site should take place. This will involve distributing refugia throughout the receptor site / railway buffer and undertaking a survey to record species present and population size. This should take place within the active season (April – September). Works will be undertaken by a suitably experienced and qualified ecologist. Monitoring surveys will be carried out in years 1, 3 and 5 with results submitted to the LPA and HBIC. If it is considered works are required to increase the suitability of the site, this information will be communicated to the management company.

2.2.9 Funding and Safeguard

Habitat monitoring and subsequent management at the receptor site must be undertaken as required to maintain its suitability to support reptiles. The management and on-going monitoring of the receptor site will be funded by Miller Homes and Gleeson Developments for a period of no less than five years following the completion of the development. The responsibility will eventually be passed onto the Residents Management Company.

2.3 Bats

The trees to be removed will be felled using soft felling techniques (i.e. works will start from the top of the tree and work down, felling the trunk in sections, remaining vigilant of any holes or crevices) in line with best practice guidelines.

2.4 Nesting Birds

Any removal of or disturbance to any vegetation on site will be undertaken between October and February inclusive (outside of bird-breeding season). If works to trees or vegetation are required within the nesting bird season (March – September) an ecologist shall check the site before any works take place (within 24 hours of any work). If an active nest is identified a 5-meter buffer will be established within which no clearance and/or disturbance can take place until the ecologist has confirmed the chicks have fledged.

2.5 Badgers

During construction any pits or trenches, will be left with an access plank at night to provide a means of escape for Badgers. In the event that a Badger is found to have become trapped, an experienced ecologist will be contacted for advice.

A toolbox talk will be given to the construction team on site which will cover information on signs of badgers and proceedings if one is found on site during the works. The construction team and site manager will also be briefed to monitor the reptile fences daily and to report any breaches so that they can be repaired as soon as possible as Badgers frequently cause damage to fencing.

2.6 Water Vole and Otter

The following timescales will be enforced, as a precautionary approach, to ensure Water Vole and Otters will not be negatively indirectly impacted:

- In April, ground vegetation must be trimmed to approximately 10-15cm, after which a hand-search will be undertaken by an ecologist. Vegetation must then be maintained at a

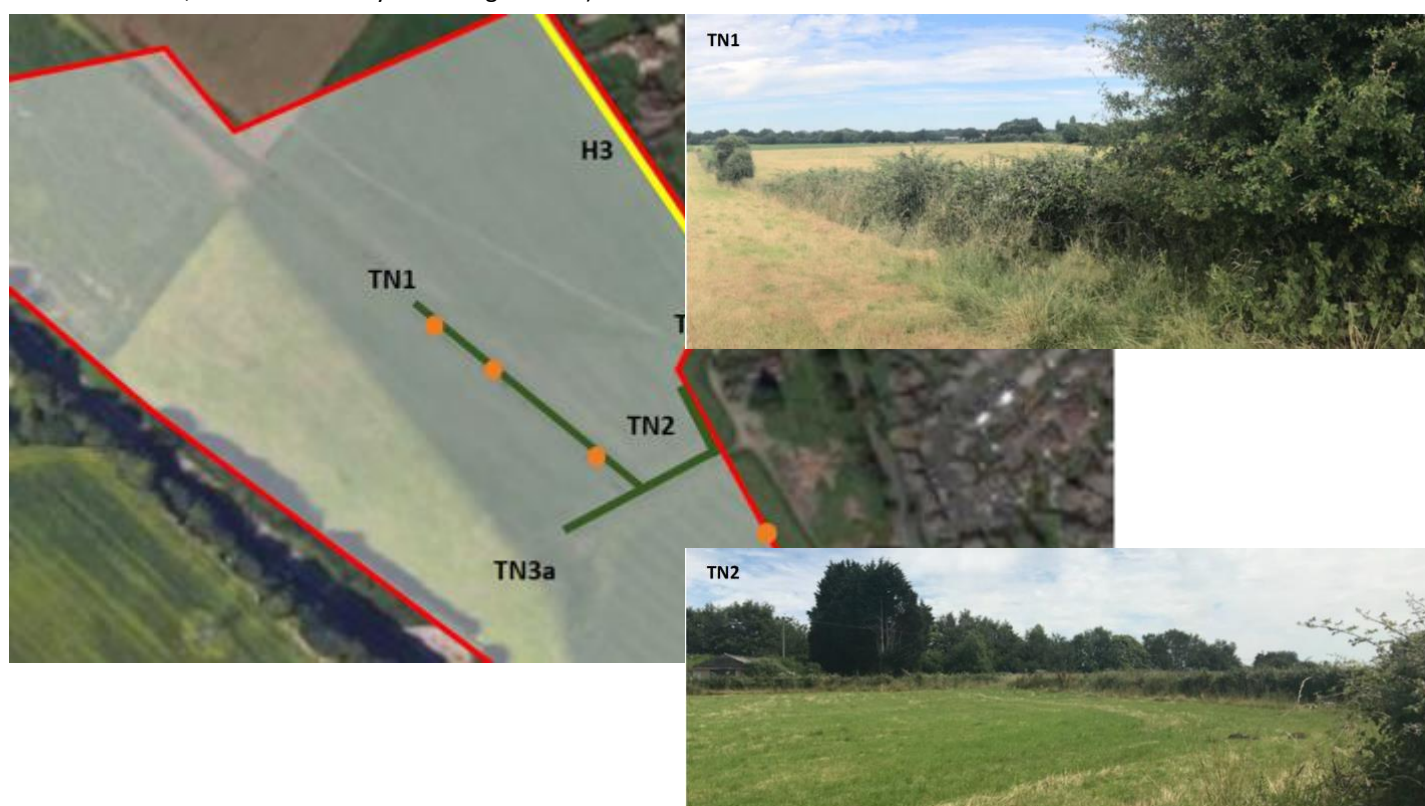
short sward height to prevent colonisation of protected species prior to topsoil stripping and channel infilling.

If Water Vole or Otters or evidence of any of the species is discovered all works will stop and NE may be consulted.

2.7 Dormouse Mitigation Strategy

As presence of Dormice has been identified on-site, a **Natural England EPS Mitigation Licence** has been applied for all works directly impacting suitable Dormouse habitat (See **Fig 7**). This licence will detail one of the following two methodologies:

Figure 7. Suitable Dormouse habitat to be removed under RM3 works (scrub indicated by the green line, standard trees by the orange circles)..



2.7.1 Single Stage Clearance

This methodology is suitable for any small-scale habitat loss where no more than 50m² of habitat will be cleared in one day.

- Fingertip search of all vegetation to be cleared, by the licenced ecologist, immediately prior to clearance commencing (on the same day and every day clearance occurs).
- Prior to works commencing, the named ecologist or accredited agent will provide all site operatives with a toolbox talk to inform them of the potential presence of dormice, their legal status, means of identification, habitat requirements, the methodologies required to avoid impacts on the species and what they should do if a dormouse is found. A written record that this has been undertaken, signed by attendees, will be kept and made available to Natural England should it be

required.

- Cut material will be removed from the areas and chipped and removed from site or area of working operations
- Hand tools will be utilised to sensitively cut vegetation down to ground level in **a single stage**. This will be undertaken in a directional fashion to passively encourage Dormice to move away from the works area towards retained, suitable hedgerow habitat to the south of the proposed access. Where areas of developing scrub are being cut, this will be done directionally towards the retained habitats. All arisings will be chipped on-site immediately.
- Dormouse nest boxes will be placed into the areas of retained hedgerow/woodland as close to the works as possible to act as receptors in the unlikely event of any Dormice being found.
- Works will take place outside of the core breeding periods (May – September inclusive) and avoid the hibernation period (November – March) and as such, the most appropriate timings would be April and October.

2.7.2 Two-stage Clearance

Where more than 50m² or >10m length gaps in hedgerows or treelines will be created, a two-stage clearance methodology will be employed. While this is required for any large-scale works, it is recommended all removals are undertaken using this method where possible.

Stage 1 – An initial clearance will be carried out during winter months (December to March) while Dormice are in hibernation. Vegetation will be cleared to 30cm above ground level using mechanical hand tools and tracking of heavy machinery over the area subject to clearance will be avoided. The licensed ecologist will provide all contractors with a Toolbox Talk prior to works to explain how works are to be carried out in a sensitive manner. All clearance will be carried out under the supervision of the licensed ecologist, who will inspect all vegetation, leaf litter and potential refugia for the presence of Dormice.

Stage 2 – Following the completion of stage one, vegetation will be cleared to ground level using hand tools from early May. At this time, any Dormice present should have emerged from hibernation and moved into more suitable retained areas of habitat. Again, the licensed ecologist will provide a Toolbox Talk for sensitive clearance and will supervise all clearance works, inspecting any roots, crevices or potential sheltering sites for Dormice prior to removal. Vegetation should be retained at ground level for the duration of the proposed construction works.

Any Dormice discovered during the works will be either be left undisturbed in place (if deemed safe by the ecologist) or will be relocated to a similar location to where they were found in retained habitat (e.g. if the animal is found within leaf litter then the animal will be placed in leaf litter). Dormouse nest boxes will be placed into the areas of retained hedgerow/woodland as close to the works as possible to act as receptors in the unlikely event of any Dormice being found.

2.7.3 Monitoring

Please note, since completion of the first draft of this report, the Dormouse EPS mitigation

licence has been granted including the following monitoring recommendations:

- A total of 16 Dormouse nest boxes have been installed in the western section of the site (**Plan 2**). These fall within Phase 1 of the development.
- Dormouse boxes will be checked once per year between the years of 2023-2032 by a licenced ecologist (or accredited agent) working under mitigation licence 2022-62167-EPS-MIT. Monitoring should cover the suitable active period between May and October, inclusive.
- Any nests found in poor condition (dilapidated/rotting) will be removed during each monitoring check of the boxes. Any nest boxes that have become dilapidated or damaged will also be replaced.

2.7.4 Interim Management

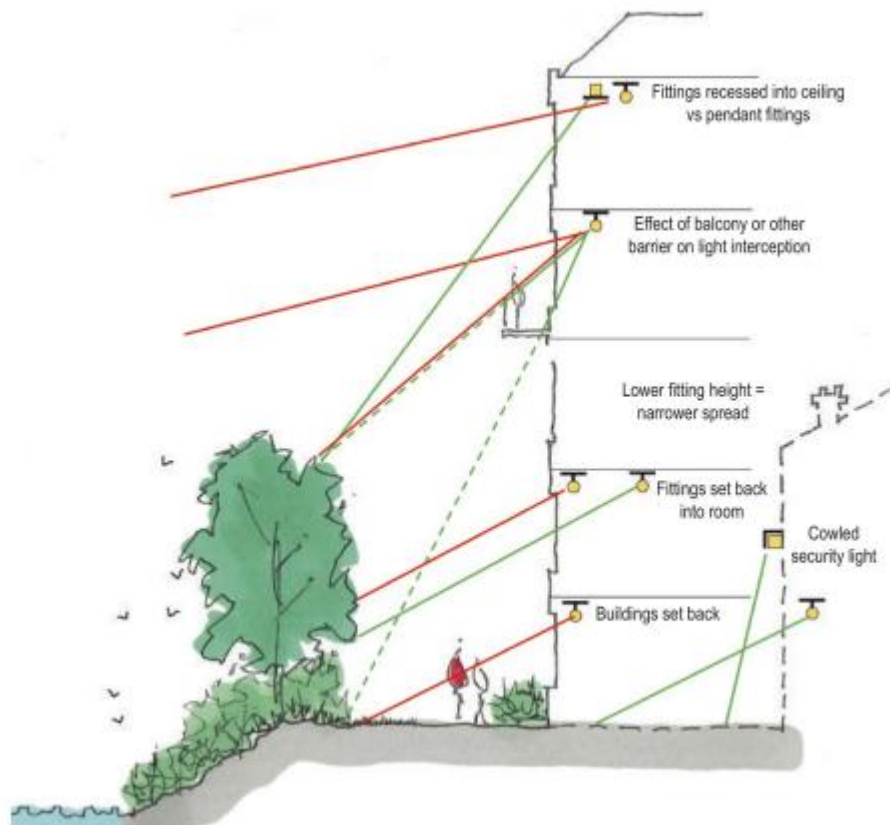
Once the developer purchased the land, the site was appropriately managed after Hazel Dormice were found to ensure no disturbance to the protected species occurred. This involved avoiding any clearance of hedgerows and scrub where possible and precautionary measures were recommended if works were necessary.

2.8 Operational Phase**2.8.1 Bats**

The following guidance has been taken from the document (*Guidance Note 08/23 Bats and Artificial Lighting at night*) (**Fig 8**) produced via a collaboration between the Institute of Lighting Professionals (ILP) and the Bat Conservation Trust (BCT), which outlines the latest recommendations to minimise the impacts of increased artificial lighting on bats. The key recommendations within this document have been outlined below and will be implemented as far as is practicable.

- *'Light sources, lamps, LEDs and their fittings come in a myriad of different specifications which a lighting professional can help to select. However, the following should be considered when choosing luminaires and their potential impact on Key Habitats and features:*
- *All luminaires will lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used*
- *LED luminaires will be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability*
- *A warm white light source (2700Kelvin or lower) will be adopted to reduce blue light component*
- *Light sources will feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012)*
- *Internal luminaires can be recessed (as opposed to using a pendant fitting - See **Figure 6**) where installed in proximity to windows to reduce glare and light spill*
- *Waymarking inground markers (low output with cowls or similar to minimise upward light spill) to delineate path edges (see Case Study 1)*

- *Column heights will be carefully considered to minimise light spill and glare visibility. This should be balanced with the potential for increased numbers of columns and upward light reflectance as with bollards*
- *Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered - See ILP GN01*
- *Luminaires will always be mounted horizontally, with no light output above 90° and/or no upward tilt*
- *Where appropriate, external security lighting will be set on motion sensors and set to as short a possible a timer as the risk assessment will allow. For most general residential purposes, a 1 or 2 minute timer is likely to be appropriate*
- *Use of a Central Management System (CMS) with additional web-enabled devices to light on demand Use of motion sensors for local authority street lighting may not be feasible unless the authority has the potential for smart metering through a CMS*
- *The use of bollard or low-level downward-directional luminaires is strongly discouraged. This is due to a considerable range of issues, such as unacceptable glare, poor illumination efficiency, unacceptable upward light output, increased upward light scatter from surfaces and poor facial recognition which makes them unsuitable for most sites. Therefore, they should only be considered in specific cases where the lighting professional and project manager are able to resolve these issues. See Case Study 6*
- *Only if all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed. However, due to the lensing and fine cut-off control of the beam inherent in modern LED luminaires, the effect of cowls and baffles is often far less than anticipated and so should not be relied upon solely'*

Figure 8. Internal lighting mitigation options (ILP 2023)

A five-meter buffer is also being retained along all hedges to minimise impacts towards commuting and foraging bats.

2.8.2 Hedgehogs

Although not recorded on site access for Hedgehogs potentially utilising the site will be achieved either through cutting a 5" hole into the bottom of the fence or leaving out a small section of gravel board (ensuring 5" clearance). This will create a Hedgehog highway (**Plan MILL1001**) through the rear gardens.

To ensure homeowners are aware of the gaps and the importance of maintaining access to these, a leaflet will be produced and included in the new homeowner information pack (this can also provide information on other ecological enhancements across the site such as bat and bird boxes). PTES also have signage which can be attached to the fence above the access holes (**Figure 9**).

Figure 9. Hedgehog access signage.



2.9 Habitats

2.9.1 Protection of Trees and Retained Hedgerows

Works will be in line with Section 4.0 of the Arboricultural Impact Assessment & Method Statement (MILL22017). Including:

Tree protective fencing - British Standard recommends a standard fencing design for tree protection. This is a weld mesh panel design, mounted upon a well-braced scaffold framework. This is adequate for this site and all the retained trees can be suitably protected by its erection before any works start on site. Once erected, all barriers will be regarded as sacrosanct, and will not be removed or altered without prior recommendation by the project arboriculturist and approval of the local planning authority.

Supervision – Supervision is required should any unplanned access and/or work be required in the construction exclusion zone. Supervision will require the arboriculturist to be present throughout the task, to ensure all the arboricultural objectives are met. If the task is to take a long period of time, provided the arboriculturist is satisfied, and after an initial 'tool-box talk', the supervision may be reduced to telephone contact between the site foreman/contractor and arboriculturist.

3.0 TIMINGS OF ECOLOGICAL MITIGATION AND PROTECTION.

Table 2 below provides timings associated with species-specific mitigation.

Table 2. Ecological Mitigation and Protection Timings.

Activity	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Erect Tree Protection Fencing												
Reptile Capture, Translocation and Destructive Search												
Soft felling of trees												
Removal of additional vegetation (not Hedgerow)												
Reduction of Hedgerow to 30cm												
Remove Hedgerow stumps												
Maintenance and monitoring of Dormouse nest boxes												

4.0 ECOLOGICAL ENHANCEMENTS

The following features will be introduced as a result of the second reserved matters section of the development. Please see **Plan 1** for locations.

4.1 Planting

The length of scrub to be removed will be replaced like for like in terms of length along the north eastern boundary (**Fig 10**) (please see landscape plan for more information).

Figure 10. Proposed location of new scrub planting in RM3 (light green).



New scrub planting should include Hazel, Oak, Elder and Dogwood with interspersed Honeysuckle. Bramble should be allowed to develop within this area to increase nesting habitat for Dormice. In addition, between the area of scrub planting, a linear feature of longer, tussocky grassland should be retained to create an 'ecotone' between the scrub planting and adjacent areas of open space to provide a buffer between Dormouse/nesting bird habitat and shorter grassland areas. EM10F will be sown within existing vegetation because this mixture can cope with competition from taller tussocky vegetation. Species include but are not limited to Yarrow, Agrimony, Garlic Mustard, Lesser Burdock, Common Knapweed, Greater Knapweed, Rough Chervil, Wild Teasel and Woolly Thistle.

4.1.1 Responsibility

The newly created scrub habitats along the north eastern boundary (please see the landscape plan for further details) will be managed for a minimum period of 12 months by the developer post completion of development, covering the first part of the establishment period. Ownership / management responsibilities for the POS will then be transferred to a management company.

4.1.2 Management of Newly Planted Areas

General Notes

- Control of grass and weed species that may compete with planted trees (either spraying or mulching)
- Replacement of dead stock
- Largely non-intervention of trimming or reduction in the first 5 years of new planting to encourage establishment and fruiting. Any spiral guards and canes will be removed in years 3-5 dependent on

establishment levels.

- Any plants that are removed, die or become seriously damaged or defective within five years of planting shall be replaced like for like in the next planting season.

Attracting Nocturnal Flying Insects

Planting a mixture of flowering plants, trees (including fruit trees) and shrubs encourages a diversity of insects to sustain bats. It is beneficial that the flowers vary in colour (although pale flowers that are more easily seen in poor light and so attract insects at dusk), fragrance, shape, amount of nectar and time of flowering. (It is important to provide native flowering plants, shrubs and trees throughout spring, summer and autumn). Flowers with 'landing platforms' for insects (i.e. flowers from the Daisy and Carrot families) increase opportunities for insects and in turn foraging bats.

Trees

Native trees are important to foraging bats. Key species are Willow, Birch and Oak as they can support high numbers of insects. In addition, once matured they can eventually provide roosting opportunities (see **Table 3** below).

Table 3. Tree species for foraging and roosting potential (Gunnell et al. 2012).

Native Tree species	Roosting potential	Supporting foraging
Oak	Very good	Very good
Willow	Minimal	Very good
Beech	Very good	Good
Ash	Good	Good
Elm	Good	Good
Birch	Minimal	Very good

Grassland

Native grassland/wildflower, tree and shrub planting has been proposed as part of the site-wide landscaping of open space. All newly planted areas will conform to species mixes and management recommendations outlined in the submitted Landscape Management and Maintenance Plan (ref MIL22017 Rev.A).

4.2 Bat Roost Features

In the interest of promoting ecology and to keep in line with National and Local policy it was recommended that bat boxes be integrated within 25% of the new dwellings. The Bat Box C design available from Ibstock has been designed specifically for crevice dwelling bat species such as the Common and Soprano Pipistrelles recorded on site.

In general, bats seek warm spaces to help them with rearing young. For this reason, bat boxes should be located where they will receive at least partial sunlight (facing south, south-west or south-east). However, by installing bat boxes in more than one orientation will allow for a choice of roosting conditions. To increase the chances of bats roosting in a bat box, the bat boxes will be placed adjacent to vegetation features such as hedges and tree lines. Bats will

be more likely to discover the artificial roost if it is placed close to an existing flight path.

Position the bat boxes a minimum of 2 m above ground, although 5-7 m is better to prevent disturbance from people and/or predators. The features should be positioned near the eaves or gable apex of buildings to minimise disturbance.

4.3 Birds

To act as a biodiversity enhancement, 50% of the new dwellings will incorporate two Swift bricks (equivalent to over a 1:1 ratio).

The 'CJ Wildlife swift maxi nesting box' with entrance via a CJ Wildlife 'Cambridge swift fullface brick' is recommended as it provides ideal nesting opportunities for Swifts and the fullface brick is available in different colours and can also be painted if necessary, to blend in with the surrounding brickwork. If this model is not suitable for the building specifications, an alternative swift box with internal floor space exceeding 400cm squared must be used. This feature should be installed at 6-7m above the ground, ensuring that there is unobstructed access for birds entering and leaving. The box should be installed under the eaves in shaded areas out of direct sunlight and away from windows.

Sparrow Terrace features will also be introduced within 10% of the new builds. These can be fixed onto the surface of a suitable wall or incorporated into the brickwork. Although designed specifically for Sparrows it may also occasionally attract Tits, Redstarts and Spotted Flycatchers.

4.4 Log Piles

Six log piles will be created along the eastern and western boundaries within the newly landscaped buffer (locations shown in Plan 1). These will form ideal places of shelter for important species such as Hedgehogs, and a significant habitat resource for invertebrates, which in turn will benefit local foraging bird and bat species.

Three of the log piles should be of a horizontal style (**Fig 11**) and one of a vertical style. The horizontal log pile should be sunk approximately 60cm into the ground to secure them in place (concrete will not be used as this prevents invertebrates from utilising the logs underground). The vertical pile will utilise logs of varying sizes and avoid using dead or decayed wood as this limits the food availability for invertebrates. The horizontal piles will involve informally stacking logs and securing with metal wire. Native wood should be used for both piles.

Figure 11. Horizontal log pile.



5.0 MAINTENANCE SCHEDULE FOR ALL GREEN INFRASTRUCTURE AND WILDLIFE FEATURES

Table 4 below provides a brief overview of the schedule for maintaining the green infrastructure on site (please see Soft Landscape Management and Maintenance Plan by ACD Environmental for full details).

Table 4. Maintenance overview.

Green Infrastructure	Action	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Existing Trees	Annual check for signs of deterioration or distress												
	Ensure bat and bird boxes are in place (replace if required)												
	Remedial Action												
Amenity Turf	Grass to be maintained at low level, cut at intervals of not more than 10-14 days depending on growing conditions.												
	Spike annually												
Wildflower Grassland	Year following sowing grass to be cut to 4-7cm												
	Subsequent years												
Newly Planted Shrub and Trees	To be checked for mammal, human or other external damage. Grilles, grids, guards and other protective furniture shall be inspected and removed as soon as it is no longer needed.												
Native Hedgerow	To be trimmed on a three-year rotation to maintain a constant supply of fruit, flowers and seeds for wildlife												
Ornamental Hedgerow	Pruning												
Tussocky Grassland	Control scrub and bramble development, areas are to be cut every 2-3 years.												
Swales	Removal of vegetation												

	Annual Assessment of pond														
	De-silt swale (every 10 years)														

If trees, shrub or hedgerow habitats need to be clipped during bird nesting season or the Dormouse breeding season, this will need to be preceded by a check by an ecologist, and supervised by a licenced Ecologist. If an active bird or Dormouse nest is found, a 5 metre or 15 metre (respectively) buffer needs to be kept free from disturbance. Due to the potential for protected species onsite, these checks must occur immediately going forward, not just once construction has been completed.

Whilst on site the management company will check the Hedgehog highway is open and accessible.

6.0 CONCLUSION

This report details methods and information to provide confidence that the appropriate levels of mitigation are being implemented, in line with Condition 22. It also provides further information on ecological enhancements. Therefore, in combination with the recommendations within the landscape management and maintenance plan, the scheme is considered likely to result in a net gain for biodiversity.

7.0 REFERENCES

Bat Conservation Trust (BCT) and Institute of Lighting Professionals (ILP) (2023) *Bats and Artificial Lighting at night*.

Bat Conservation Trust (BCT) (2012). *Bat surveys: Good practice guidelines*. 2nd edition. Bat Conservation Trust, London.

CIEEM (2018). *Guidelines for Ecological Assessment in the UK and Ireland*. Chartered Institute of Ecology and Environmental Management, Winchester.

Collins, J. (ed.) (2016) 'Bat Surveys for Professional Ecologists; Good Practice Guidelines' (3rd edn). The Bat Conservation Trust, London.

Ecosupport Ltd (2021) Land to the North West of Boorley Green. Second Reserved Matters Application Ecology Report (Updated May 2021).

English Nature (2004). *Bat Mitigation Guidelines*. A. J. Mitchell-Jones, English Nature.

English Nature (2006). *The Dormouse Conservation Handbook*. P. Bright, P. Morris, T. Mitchell-Jones, English Nature.

Froglife (1999). *Reptile Survey: An introduction to planning, conducting and surveys for snake and lizard conservation*. *Froglife Advice Sheet 10*. Froglife, Halesworth.

HGBI (1998) Evaluating local mitigation/translocation programmes: Maintaining Best Practice and lawful standards. HGBI advisory notes for Amphibian and Reptile Groups (ARGs). HGBI, c/o Froglife, Halesworth. Unpubl.

HMSO (1981). *The Wildlife & Countryside Act 1981*. HMSO, London.

HMSO (2000). *The Countryside and Rights of Way Act 2000*. HMSO, London.

Herpetofauna Groups of Britain & Ireland. (1998). *Evaluating local mitigation/translocation programmes: maintaining best practice and lawful standards*. HGBI advisory notes for Amphibian and Reptile Groups (ARGs). HGBI c/o Froglife, Halesworth, Suffolk.

JNCC (2003). *Handbook for Phase 1 Habitat Survey*. Joint Nature Conservation Committee, Peterborough.

Natural England (2007). *Badgers and Development: A Guide to Best Practice and Licencing*. Interim Guidance Document. Natural England.

Natural England (2009). *Protection of Badgers Act 1992 (as amended): Interpretation of 'Disturbance' in relation to Badgers occupying a sett*. June 2009. Natural England.

Natural England (2009). *Protection of Badgers Act 1992 (as amended): Guidance on 'Current Use' in the definition of a Badger Sett*. June 2009. Natural England.

Natural England (2011). *Badgers and Development – A Guide to Best Practice and Licencing*. Interim Guidance Document, revised 12/11. Natural England.

Natural England (2014). *Environmental Management – Guidance. Badgers: Protection and Licences*. Available from: <https://www.gov.uk/guidance/badgers-protection-surveys-and-licences>

Natural England (2018). *Badgers: Surveys and Mitigation for Development Projects*. Available from: <https://www.gov.uk/guidance/badgers-surveys-and-mitigation-for-development-projects>

Natural England (2018). *Wild Birds: Surveys and Mitigation for Development Projects*. Available from: <https://www.gov.uk/guidance/wild-birds-surveys-and-mitigation-for-development-project>

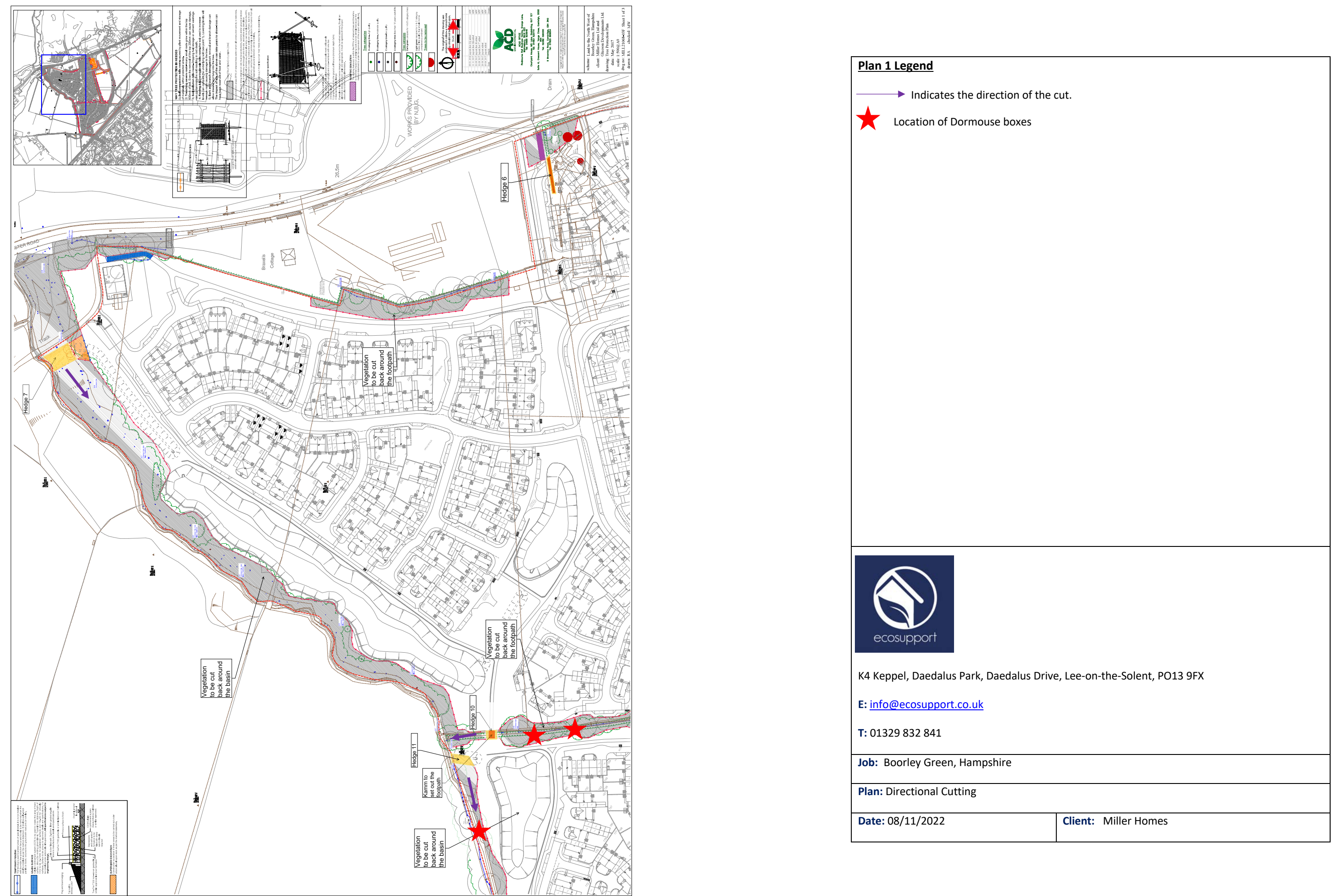
Plan 1-Enhancements Plan (RM3)

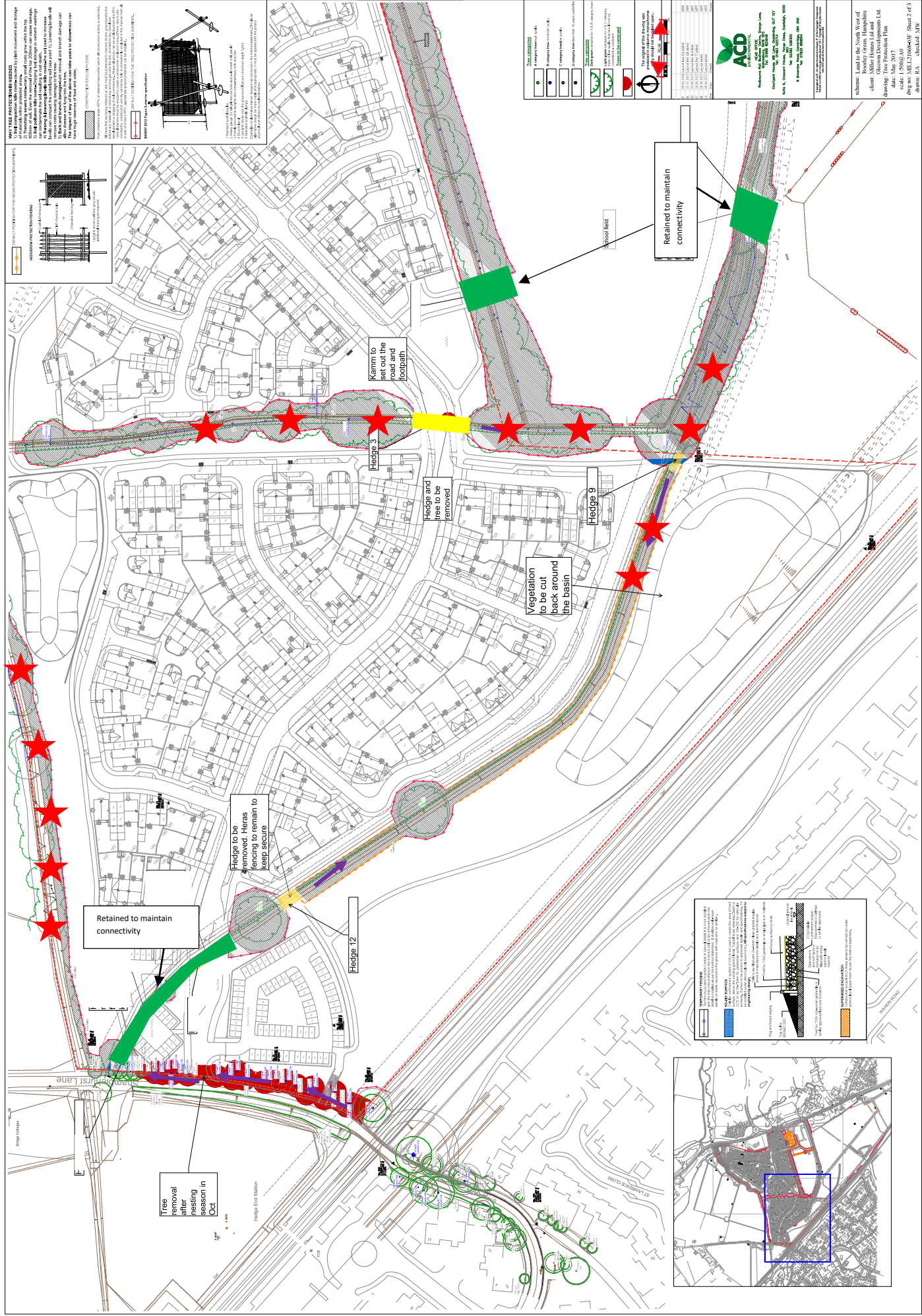
Plan 1- Ecological enhancements plan for third reserved matters (June 2022).



Plan 2- Dormouse Mitigation Figure

Figure E2. Locations of habitats where directional cuts (purple arrows) will take place to encourage the displacement of Dormice out of the works area. Any captured Dormice will be placed with any nest in the closest nest box (red star).





Plan 3 - EPS Licence Method Statement

Hazel Dormice – Method Statement template to support a licence application

The Method Statement will be used to determine the impact of the proposal on the favourable conservation status (FCS) of the species concerned (Regulation 55(9)(b)).

You are strongly advised to refer to the Dormouse Conservation Handbook. Please use recent photographs to support your application.

Wildlife Licensing
Natural England
Horizon House
Deanery Road
Bristol
BS1 5AH.
T. 020802 61089

Important advice:

The format below must be used. Please enter text below each heading keeping information as concise as possible.

All maps/figures that will become part of any dormouse licence granted must be submitted as separate documents (with the site name and date included on the map/figure. See section I for list – all others may be included within the Method Statement document (e.g. survey maps/figures) if preferred).

A separate Work Schedule must also be submitted on form WML-A35a-E5a&b to accompany the Method Statement.

A Executive summary

Provide an overview (no more than 1 side of A4) of what works are proposed and how the impacts identified will be addressed in order to ensure no detriment to the maintenance of the population at a favourable conservation status.

Planning permission was granted by Eastleigh Borough Council for the creation of a new open space and the construction of 680 new dwellings, to the Land North West of Winchester Road, Boorley Green SO30 2UL (centered on OS grid reference SU501941486).

To allow for the working area to be free from constraints, a small area within the hedgerow will require removal. A licence is required after a dormouse hibernation nest was spotted whilst undertaking precautionary working methodology during a single staged clearance.

The works will involve the removal of approximately 0.15ha of hedgerow/treeline to create the new access (accounting for visibility splays as well).

The permanent loss of approximately 0.15ha of habitat will be compensated for through the reinforcement of the existing hedgerows / tree lines on-site (focused along the northern boundary). Species that will be included within all planting areas for Dormice on site will include (reflective of those found on-site and in the wider area):

- Hazel (*Corylus avellana*)
- Hawthorn (*Crataegus monogyna*)
- Blackthorn (*Prunus spinosa*)
- Holly (*Illex aquifolium*)
- Wild Privet (*Ligustrum vulgare*), and climbers such as
- Dog Rose (*Rosa canina*) and Honeysuckle (*Lonicera periclymenum*).
- Alder Buckthorn (*Frangula alnus*)
- Common Broom (*Cytisus scoparius*)

- Field Maple (*Acer campastre*)
- Guelder Rose (*Viburnum opulus*)
- Wayfaring Tree (*Viburnum lantana*)

B Introduction

B1 Background to activity/development:

Include a brief summary of:

- Why the activity and a licence are necessary (e.g. *site preparation for a new housing development will remove hedgerows which dormice are known to nest in; the installation of an underground pipeline will require the removal of sections of hedgerow used by dormice; blocks of woodland inhabited by dormice will be removed for construction of the proposed road scheme*).

Site preparation works for new access roads will require the removal of 800m² section of hedgerows located along the western hedgerows towards Shamblehurst Lane.

- Include the site/project name and provide an OS grid reference to 8 figures (e.g. format AB 12345678).

Land North of Hedge End, Botley, Hampshire, SO32 2RR, (SU50311483).

- Include current status of planning permission (if applicable) e.g. *full planning permission with all relevant wildlife conditions discharged; permitted development; demolition with prior notification of demolition issues resolved*.

Outline planning permission was granted under planning reference number O/15/75953. Reserved matters permission was then granted for three separate phases under RM/17/81628, RM/18/84466, and RM/19/86658.

Construction has commenced on all phases and all wildlife-related conditions have been discharged.

B2 Relationship with other nearby development and cumulative impacts

B2.1 Is the current application part of a larger development project? For example, is it part of a phased or multi-plot housing development that will require more than one dormouse licence? Enter Yes, No or N/A in the text box below. If yes, note a separate [master plan](#) document will be required.

No

Important Advice: If yes to the above, please note that sections in [this](#) Method Statement on impact assessment and mitigation measures must explicitly relate *only* to impacts from the works currently proposed.

A project-wide master plan must detail the overall impact assessment and mitigation and explain where, and why, each of the dormouse licences will be required. The master plan must be included as a separate document to this application. The separate master plan is expected to take due regard of the overall project to ensure that in-combination effects are considered, and mitigation and compensation measures are both sufficient and coherent.

If the current development is part of a larger development project, summarise very briefly here how the current application relates to the larger project and how the in-combination effects are considered and mitigation/compensation is sufficient.

Dormouse licence is for all 3 stages under outline permission O/15/75953.

Important Advice: to accompany this Method Statement also include **Figure B2.1 for a Master plan overview - and see section I "Map checklist" at the end of this document.**

B2.2 Apart from any mention in B2.1, please inform us of any past or future development or other projects (in the last 5 years or next 5 years) in the vicinity which may have significantly impacted or are likely to significantly impact on the same population/s of dormice as this application. You must make reasonable efforts to establish this, including discussions with your client and the Local Planning Authority – stating below what you undertook. A brief summary of the project/s should be provided including the site name and location, dates and if known the licence reference number(s).

Please note we are not expecting details of every licence/planning permission issued within the vicinity of the site – we are only concerned with projects that have the potential to significantly impact or have impacted on same population of dormice. Note: Natural England is aiming to make available licensing records from the last 5 years publically available.

A search for local granted Natural England Dormouse mitigation licences on Magic Maps within 2km returned 1 results located 1km east of the site. This is for the nearby Boorley Park housing development to the north east of Winchester Road (licence reference numbers 2014-6322-EPS-MIT-1 and 2014-6322-EPS-MIT). Considering the close proximity of this development, and the presence of mature trees providing natural bridges over Winchester Road, it is considered likely this will be impacting the same population of Dormice. Despite this, these works were completed under licence and would have been mitigated and compensated for accordingly.

Important Advice: locations of other dormice mitigation sites in relation to this proposal must be shown on Figure B2.2.

C Survey and site assessment (also see section 3 of the Dormouse Conservation Handbook)

C1 Pre-existing information on dormice at the survey site:

Please undertake a historical data search within a 1km search radius and provide a summary of the results of this search. For example, records from local environmental records centres, local dormice/wildlife groups and previous survey work undertaken at the site is all relevant.

- Should no historical records be found from your search please state this – and specify what searches you undertook.
- Note that you must not include records from National Biodiversity Network (NBN) without first obtaining written permission from the relevant Data Provider.

Please see the above information on local Natural England Dormouse mitigation licence applications.

A total of 2 local records of Hazel Dormice were found following a search of the National Biodiversity Network Atlas as part of the National Dormouse Data base (permission obtained from PTES who hold the records) to the north east of Boorley Green.

No local records of Hazel Dormice were identified on the Hampshire Biodiversity Information Centre data request submitted as part of the planning application.

C2 Status of the dormouse population: Briefly detail conservation status at the local, county and regional levels. Please complete the following table, justifying your assessment. If the status is unknown then please enter 'unknown'.

Conservation status assessment		
Local	County	Regional
	There was a max count of 1 hibernation Dormouse nest. This suggests the presence of a population within the development site and all hedgerows and scrub were therefore assumed to be part of the local population habitat. The site as a whole was therefore considered to be of County value for Dormice due to the national rarity of the species. Dormice are however relatively common and widespread within Hampshire and have been recorded in suitable habitat across the county.	

C3 Survey summary: Please provide a brief summary of the survey undertaken. If standard survey effort was not undertaken please justify why.

A nest tube survey had been set up on-site and in the wider area within client ownership during June 2017. A total of 50

tubes were placed within all suitable habitats found on site and the surrounding area at approximately 20 m intervals as per Bright et al., (2006). The tubes were checked monthly from May 2017 through until September 2017 to try and ascertain if there is any breeding taking place on-site.

No evidence of Dormice was found on-site. However, during clearance works completed under a RAMS for Dormice in May 2022 one hibernation nest was discovered.

C4 Site/habitat description: Please provide:

- A brief description of the site including:
 - Total size of the development site (ha) (most often within the red line planning boundary)
 - A breakdown of the different habitat types the site is comprised of (ha of each habitat type present) – i.e. regardless of their value to dormice
 - An indication of the habitat types on site with potential value to dormice (e.g. 4 ha habitat of ancient woodland, 400m of coppiced hedgerow; 1ha of scrub, etc), differentiating between those surveyed and not surveyed, with an explanation why.

Ensure habitat types are referenced and consistently indicated on relevant figures and tables.

The total area of the development site is roughly 43.4ha.

The following habitat types are present on the development site:

Habitat Type	Area	Value to Dormice	Surveyed
Modified Grassland	36.7ha	Negligible	N- unsuitable
Hedgerow	4.5ha	High	Y
Woodland	1.8ha	High	Y
Scrub	0.4ha	Moderate	Y

The hedgerows running along the sites boundary are key habitat of value for Dormice on site.

- A description of adjacent areas/offsite habitats, specifying any relevance to dormice, including descriptions of habitat/s relevant to dormice connectivity to and from the site.

The western boundary hedgerow is connected up to the railway, offering a great dispersal corridor into the wider landscape. The hedgerow subsequently links up to wider areas of woodland in the local landscape, thus acting as an important dispersal route for dormice to freely move between habitats in the wider landscape linking up otherwise isolated blocks of woodland.

- Please also include annotated (cross reference the habitats) and dated photographs as these are very useful as an assessment aid. These can be inserted below or submitted as a separate (referenced) document.

C5 Field survey(s): See requirement for location map (C5a) and survey area (C5b) in Checklist I.

Please complete the following tables and add additional lines where necessary. Please enter 'N/A' if the table is not applicable to your survey:

Dates survey undertaken (e.g. format 01/06/13 to 15/10/13)	Survey method (e.g. tubes/nest boxes; nut searches; other – please specify)
22/05/2017 to 16/09/2017	Nest Tubes
Comments (include # of tubes/boxes and date of first installation/quadrats/other field signs etc): A total of 50 tubes were erected within suitable habitats for Dormice in May 2017.	
Comments:	
Comments:	

Comments:	
Comments:	

Please provide surveyors names (including Class Licence registration number if applicable).

Survey conducted by Sophie Hughes Licence number 2016-26788-CLS-CLS

Please explain any constraints on the survey/s undertaken (time of year, cold weather, refused access, safety issues preventing access etc – justify as necessary and include evidence where required). If access was refused please provide evidence (letter/email) to demonstrate this.

No constraints identified

Please confirm (Yes, No, N/A) that a walk over survey/check has been carried out within 3 months prior to application submission to ensure that conditions have not changed since the most recent survey was undertaken. If 'yes' – provide the date/s undertaken and details of any changes to conditions and habitats on site since the surveys were undertaken. If no walk-over survey/check has been undertaken please explain why.

Yes Katalin-Anett Balazs of Ecosupport Ltd undertook an updated site walkover on the 21/06/2022. The habitats on-site were considered to be broadly similar to those identified within the existing reports for the site.

C6 Survey results: Summarise your findings in the tables below and cross reference to **Figure C6** (which must also include locations of positive field signs – see Checklist I). If you did not undertake a specific survey type please add N/A to the relevant table/s.

When completing “**Findings**” include reference to *direct observations, presence of field signs, etc.*

Nest tubes & nest box check results

Date (e.g. format 01/06/14 to 15/10/14)	Evidence (Yes / No)
05/05/17 to 11/09/17	
Findings: No evidence	
Findings:	
Findings:	
Findings:	

Provide further (brief) comments/explanation if required:

--

Nut search results

Date (e.g. format 01/06/14)	Quadrat site
Findings (include % of nuts opened by dormice):	
Findings:	
Findings:	
Findings:	
Findings:	

Provide further (brief) comments/explanation if required:

C7 Interpretation/evaluation of survey results:

Guidance: *Natural England advises that caution is taken when interpreting the results of dormice nest tube surveys; a common misconception is that nest tube surveys provide accurate dormice distribution data. However, usage of nest tubes by dormice is patchy and depends on a whole range of site specific factors, such as the presence of suitable locations for natural nests. Natural England considers that once dormice are detected they should be assumed to be present in all suitable habitats on site, unless there are effective barriers to movement.*

Please provide the following:

- A best estimate of dormouse numbers based on data collected, available habitat and published data

The survey work covered the main part of the active season. The presence of zero records during the surveys indicated absence of Dormice within the site.

However due to the suitable habitat a precautionary approach was undertaken, and during the single stage clearance in May 2022 a single hibernation nest was identified and works stopped immediately.

Dormouse live at low numbers, even in the best quality habitat (Dormouse Conservation Handbook, 2006) and the mean spring population density in optimal habitat (diverse deciduous woodland) is approximately 4 to 10 adults per hectare with the average population density across the country being 2.2 per ha, including sub-optimal habitats (Dormouse Conservation Handbook, 2006).

Therefore, based on the presence of approximately 6.7ha of favourable dormouse habitat, a population estimate for the site would be approximately 12 Dormice. Despite the retention of a number of hedgerows, it is anticipated that the same number of dormice as stated above would be impacted by the clearance works.

- Status and significance of the population

The population identified was considered to be of local-county value due to the evidence of dormice present. The population recorded is considered likely to be part of a wider population in the local area.

- An assessment of the importance of the site for dormice in the context of the wider landscape, *consider the site's location within the geographic range for dormice; dispersal corridors; connectivity to offsite woodland habitat, quality of habitats on site etc*

The western boundary hedgerow is directly connected to hedgerows which intersperse into the wider landscape and connects up to isolated blocks of woodland. The hedgerows link up the nearest block of woodland directly adjacent north west of the site. This block of woodland subsequently offers direct connectivity to other blocks of woodland in the wider landscape by interconnecting hedgerows along the railway line. These areas subsequently act as an important dispersal route for Dormice to freely move between habitats in the wider landscape, freely linking up isolated small blocks of woodland that would otherwise be isolated. In addition, the hedgerows on-site support nut and berry producing species, such as Hazel and Bramble, which provide a protracted source of food throughout the year for local Dormice.

Provide further (brief) comments / explanation if required:

Important Advice:

Survey maps that must be included in this section of the Method Statement, or as separate documents if preferred, are listed in section I "Map checklist" at the end of this document.

D Impact assessment in absence of mitigation or compensation (also see section 5 of the Dormouse Conservation Handbook). Where appropriate you must take into consideration cumulative impacts of your proposals on the dormouse population/s identified in your survey in each section.

D1 Short-term impacts: The impact/s of activities undertaken on site pre-development and during works must be considered and explained. **Consider disturbance** (such as human presence, noise, vibration, use of

machinery for site preparation works etc), **temporary damage and temporary loss of habitats and injuring/killing.**

1527.62m² of the hedgerows/tree lines around the site are to be lost. Should adequate mitigation not be implemented this could result in direct harm to individual Dormice should they be present within the vegetation being removed, which would constitute a major negative impact at a site level (and an offence under wildlife legislation). However due to the likely presence of Dormice in the wider habitat, and the retention of areas of suitable habitat on-site as well as the creation of new improved hedgerows, this would likely constitute a negative impact upon the local population and a minimal impact at a national level.

Short-term disturbance impacts on the local Dormouse population are likely to occur during the construction works related to the development. There is anticipated to be an increased level of disturbance (noise, vibration and visual) to any Dormice present within the retained habitats / woodland from the movement of any heavy machinery and the presence of construction workers. However, with the small amount of works to be undertaken on-site it is anticipated that the increase in disturbance will only be minimal above baseline levels. Furthermore, it is likely there will be an increase in dust deposition on vegetation and an increase in localised light pollution from the construction area. Such impacts could dissuade Dormice from occupying retained habitats on-site and habitats in the immediate environs and/or limit breeding success. Should adequate protection not be implemented around all retained habitat, accidental encroachment by machinery and the inappropriate storage of construction materials could also result in damage to retained habitats, decreasing their suitability and putting any individual Dormice present at risk of harm. Unmitigated works are considered likely to result in a moderate negative impact at the District level.

D2 Long-term impacts: habitat loss or modification Consider and explain the impacts of the proposed works on the dormouse population at a site, local, regional, and national level.

E.g. Removal of Xha scrub habitat for railway embankment stabilisation scheme – Medium negative impact on a site level; medium negative impact at a regional level; low level impact at a national level.

Works will have an adverse impact on Dormice at the site level through clearance of small sections of interconnecting hedgerows towards the western end of the site. In addition to the direct risk of killing/injuring individual Dormice and the disturbance of any potential nests during works, there is also the minor long-term impact caused by the loss of suitable habitat post-development.

In the long term there may be small operational impacts from increased noise and human disturbance associated with the new development, however, as Dormice are nocturnal it is anticipated that this will be minimal.

D3 Fragmentation and isolation: Will the proposed works result in these types of impacts? *E.g. loss of linear features such as hedges, tree lines, severance of dispersal routes by roads/rail lines, loss of connectivity between existing wooded or hedgerow habitats as a result of the proposal, etc.* Please explain.

The western and central sections of hedgerows that are to be removed as part of the plan (including sections 11, 10, 9 and 12), will leave a further 0.6ha of hedgerow temporarily isolated from the surrounding hedgerows to the south.

D4 Post-development interference impacts: e.g. human activity as a result of new housing development, by new motorway, increased risk of predation from domestic cats, etc. Please also consider other direct or indirect post development impacts which may include disturbance/ injuring/killing.

E.g. Occupancy of proposed 200 unit housing development will result in an increased recreational use of retained woodland 'dormouse' areas leading to a likely increase in disturbance and possible increase in predation risk (by cats, dogs etc). Moderate to high negative impact at a site and local level.

In the long term, operational impacts from increased noise and human activity associated with the new road may occur, however, as Dormice are nocturnal it is anticipated that this will be minimal.

D5 Impact Summary

D5.1 Summary of dormouse habitat types to be damaged or destroyed as a result of the proposal: Please complete the following table.

Dormouse habitat type (ha) e.g. hedgerow, woodland, scrub	Total quantity of habitat to be Damaged (ha)	Total quantity of habitat to be Destroyed (ha)
Hedgerow		0.15ha

Total quantity		0.15ha

Please ensure consistency with figures provided with section C4.

D5.2 Predicted scale of impact of this development/activity on species status: Please complete the following table to explain what impacts are likely to be at the site, local/county and regional levels.

Estimated #s of dormice likely to be affected by proposal	Predicted scale of impact (<i>insert Low, Medium, High in columns below</i>)			Notes (include impact on population)
	Site	County	Regional	
4 adults in hedgerow habitat (a larger number has been estimated to account for the post-breeding increase in numbers).	High	Low	Negligible	At the site level, approximately 800m ² of suitable dormouse habitat will be lost. However, based on the relatively small scale of works in the context of the available habitat both within the retained hedgerows and the wider environ, it is considered that the works will not have a significant impact at either the county or regional levels.

Provide further comments/explanation as required, particularly should cumulative impacts be incurred (this information helps develop an understanding of how the impacts will be mitigated or compensated when assessing information provided in Section E):

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Important Advice:

Please ensure that a separate 'Impact map' is provided (**Figure D**) which must indicate all areas and habitat types (clearly referenced) that will be disturbed, damaged and / or destroyed (please specify the level of impact on the figure). Also see section I "Map checklist" at the end of this document.

E Mitigation and Compensation (please also see section 4 & 5 of the Dormouse Conservation Handbook)

E1 The mitigation solution being proposed in the method statement should be the one that delivers the 'need' with the least impact on the dormouse population.

Please explain why this design was chosen over other potential solutions – clearly set out what other designs were considered and why they were not feasible (e.g. *if the proposal for a road scheme will directly impact on a small section of woodland inhabited by dormice, explain why it is not possible to retain that section of woodland and to avoid the impact; if timings to undertake the works are at a time of year when dormice are breeding explain why the works cannot be timed to avoid this most sensitive period, etc*).

The mitigation strategy for the removal of Dormouse habitat on site has been informed by best practice guidelines (Bright *et al.*, 2006) and information from Natural England's Dormouse Mitigation online guidance pages.

The permanent loss of approximately 0.15ha of habitat will be compensated for through the planting of new hedgerow on-site which will run from the northern boundaries of site by reinforcing and planting fruiting species beneficial for dormice. Species that will be included within the re-enforced hedgerow will include (reflective of those found on-site and in the wider area):

- Hazel (*Corylus avellana*)
- Hawthorn (*Crataegus monogyna*)
- Blackthorn (*Prunus spinosa*)
- Wayfaring Tree (*Viburnum lantana*)
- Wild Privet (*Ligustrum vulgare*), and climbers such as
- Dog Rose (*Rosa canina*) and Honeysuckle (*Lonicera periclymenum*).
- Field Maple (*Acer campastre*)

- Guelder Rose (*Viburnum opulus*)
- Oak (*Quercus robur*)

The mitigation solution meets the identified need while maintaining a viable population of Dormice at the site.

In addition, fragmentation caused by the removal of hedgerow sections 9 and 10 to make way for cycle paths will be mitigated by the installation of vegetated trellis 'bridges' over the paths to maintain connectivity (see Figure E3). These trellises will be planted up with Honeysuckle (*Lonicera periclymenum*) to provide an additional food source for Dormice.

E2 Methodology

E2.1 Search and clearance of dormouse habitat: Please provide details on the areas involved in search and clearance of habitat (this detail must be in line with impacts **Figure D**). If not applicable to your proposals please state 'N/A' in the relevant text boxes. Also note requirement for **Figure E2**.

Single-stage habitat clearance	
Details of dormice habitat to be cleared following the single-stage clearance technique (as defined in the Dormouse Conservation Handbook)	
Quantity of habitat to be cleared	0.0096ha
Description of the habitat types to be cleared	Hedgerow
Clearance to be undertaken within best practice timing of April – May (inclusive) and/or mid-September – October (inclusive)	☒ Yes ☐ No If No, please provide details of proposed timing and justification
Confirm that a maximum of 0.25ha is to be cleared per day, on successive days	☒ Yes ☐ No Estimated number of days 2 days If No, please provide details and justification
Tools to be used	Hand tools ☒ Yes ☐ No Other as specified:
Measures to maintain connectivity to retained habitat (if applicable), i.e. dead hedging	N/A
Other:	
Two-stage habitat clearance	
Details of dormice habitat to be cleared following the two-stage clearance technique (as defined in the Dormouse Conservation Handbook)	
Quantity of habitat to be cleared	0.14
Description of the habitat types to be cleared	Hedgerows and tree lines
Clearance to be undertaken within best practice timing of stage one in November – March (inclusive) and stage two in April – May (inclusive)	☒ Yes ☐ No Estimated number of days/ weeks 28 days If No, please provide details and justification
Tools to be used	Hand tools ☒ Yes ☒ No Other as specified:
Measures to maintain connectivity to retained habitat (if applicable), i.e. dead hedging	Installation of planted wooden trellis over points 9, 10 and 12 to retain connectivity to hedgerow between these points.
Other:	

E2.2 Capture and release (if applicable):

Please confirm that you agree to undertake the following procedures if a dormice is encountered during works:

Where active dormice are discovered during works and it is possible to allow them to move independently to safe habitats, outside high risk work areas, this will be the first course of action. Where this is not possible, either:

- In the active season, dormice that are active or torpid will be relocated in their existing nest to suitable habitat, or a specially erected dormice nest box (if applicable), within 100m of the 'capture' location.*
- During hibernation, dormice found outside high risk areas, such as haul routes, must remain in situ. Where hibernating dormice need to be moved, the existing nest must be relocated, with surrounding material, to a location within 100m of this site similar in condition and aspect to the existing hibernation nest location. It must then be covered by suitable material, i.e. a log or clay tile for protection. In the unlikely event of the animal rousing from hibernation it should be taken into captivity until it can be released within 100m of its capture site at a suitable time.*

Where a breeding nest is discovered, works must stop and provision be made for the nest to remain in situ, undisturbed and connected to contiguous habitat, until the young have been weaned and allowed to disperse naturally. Only following dispersal of all young from the nest shall licensable works in this location re-commence.

Yes, I agree / No, I don't agree
Yes

If NO, please provide justification below. Please use this text box to describe any additional information on protocols to be employed if dormice are found during works.

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Should your proposals include capture (taking) and release please see requirements for Figure E2 (in Checklist I) and specify below:

- Numbers of dormice that are likely to be affected at the time the works are to be undertaken. Note: *this may be different to the maximum number of dormice estimated during survey as timings for works should be at a time when dormice are least likely to be directly impacted.*

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E3 Dormouse compensation: Please detail how all impacts to dormice (as identified in section D) will be compensated. If not applicable to your proposals please state 'N/A' in the relevant boxes (also note requirement for **Figure E3 and E4** below).

E3.1 Enhancement and / or restoration of dormouse habitat – Provide details of all works including:

Enhancement measure <i>Select 'yes' or 'N/A' if not applicable to this application</i>	Quantity	Details of location (must also be clearly shown on Figure E3)	Additional details <i>i.e. species composition, size of whips (where applicable)</i>
Hedgerow gap planting ☐ Yes ☒ N/A	Length (m)		
Hedgerow translocation	Length (m)		

☐ Yes ☒ N/A			
Coppice stool translocation ☐ Yes ☒ N/A	Area (ha) / length (m)		
Habitat re-instatement / restoration ☐ Yes ☒ N/A	Area (ha) / length (m)		
Woodland thinning / coppicing ☐ Yes ☒ N/A	Area (ha)		
Woodland infill planting to increase species diversity ☐ Yes ☒ N/A	Area (ha)		
Other:			

E3.2 Creation of new habitat – Provide details of all works including:

Compensation measure <i>Select 'yes' or 'N/A' if not applicable to this application</i>	Quantity	Details of location (must also be clearly shown on Figure E3)	Additional details <i>i.e. species composition, size of whips (where applicable)</i>
New hedgerow planting ☒ Yes ☐ N/A	Length (m) 271	North western boundary	Species that will be included within all planting areas for Dormice on site will include (reflective of those found on-site and in the wider area):, Hazel, Hawthorn, Blackthorn, Holly Wild Privet, and climbers such as Dog Rose and Honeysuckle, Alder Buckthorn, Common Broom, Field Maple, Guelder Rose and Wayfaring Tree. Whips used will be of 60 - 90 cm minimum height.
New scrub planting ☐ Yes ☒ N/A	Area (ha)		
New woodland planting ☐ Yes ☒ N/A	Area (ha)		
Nest box installation ☒ Yes ☐ N/A	Number 16		
Connectivity / linking	3 planted metal	Points 9 and 10 on Figure E3	Trellises to be planted with native

structures (e.g. dead hedging)	trellises		Honeysuckle
☒ Yes ☐ N/A			
Other:			

E3.3 Summary of compensation – please summarise the total quantity of dormice habitat to be enhanced and / or provided as compensation.

Total quantity of dormice habitat enhanced / restored (total of Table E3.1) in ha / metres		Total quantity of dormice habitat created (total of Table E3.2) in ha / metres	
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Provide further (brief) comments/explanation if required: Note that compensation measures are expected to result in no net loss of dormice habitat. If your proposals will result in an overall net loss of available dormice habitat please provide full justification on how the favourable conservation status of the population will be maintained.

N/A

If you are proposing **enhancement** of existing habitat, please provide details to justify that the existing habitat is in need of enhancement and / or has the potential to be enhanced.

N/A

E3.4 Bridges and other permanent linking structures *Note – creation of dormouse bridges to mitigate for fragmentation impacts for high impact cases must be protected in the long term.* Please provide details of:

- Planting
- Siting, including why and how area/location for creation was selected
- 8-figure grid reference on location
- Design (including length, width, height, installation details and materials to be used)
- Evidence (if necessary) to provide reassurance that such a design is used or will be used by dormice (also see requirement for **Figure E3** and the need for long term site safe guard, security and monitoring and maintenance of such a mitigation measure in section E4).

Wooden trellises will be erected at points 9, 10 and 12 (SU50011484; SU50011514) on Figure E3. These will be designed to be approximately 3m in width (allowing 0.5m either side of the cycle path) and a height of 2m and a width of 1.5m. The trellises will be installed on completion of the first stage of clearance to provide a route of dispersal for hibernating Dormice between points 9 and 10. The trellis will be installed and the Honeysuckle planted immediately after the first stage of clearance in November to give the Honeysuckle time to establish for Dormouse dispersal during the following spring and summer. The trellis will be secured in place by installing the foot of the trellis 2 feet underground.

Yearly monitoring checks will be completed to check the trellis for signs of damage and the structure will be repaired/replaced, as necessary.

E3.5 Wider biodiversity gains:

Please indicate if enhancements, over and above what is necessary to mitigate the impact of the activity of the licence proposal, are being provided. Please indicate if enhancements are included to satisfy the requirement of a planning permission, and if so state the relevant planning condition, or other consents in your response below. Please also state if an applicant wishes to provide more than is typically required to mitigate for the impacts. Enter N/A if this is not applicable to your application.

Note: Any licence granted will only cover mitigation and compensation required to fulfill licensing requirements, but will acknowledge additional biodiversity enhancements to be provided.

Important Advice:

Scaled maps/plans of mitigation/compensation must be provided as separate maps/figures (also **see section 1 "Map checklist" at the end of this document for more detail**). Please remember to date your maps/figures and include a relevant site name and / or grid reference.

- **Figure E2** to show search and clearance of dormouse habitat and indicate which areas will be subject to the different methodologies showing direction of displacement where applicable (ensure this is clearly labelled and consistent with other mandatory maps/figures).
- **Figure E3** to show specifications for mitigation / compensation to be provided, and or retained/enhanced habitats, and annotate where it will be provided. Indicative locations of dormouse boxes must also be shown. Should the scheme be large or complicated it may be necessary to submit more than one figure (note: this will be necessary should linking structures be required see Checklist I – as the design detail must also be provided). For development schemes, include the final development layout.

NOTE: It must be possible to compare these with the survey results plan (**Figure C6**) and 'Impacts' Figure (**D**).

E4 Post-development site safeguard: Further guidance and explanation on post-development monitoring requirements are included within our 'How to get a licence' document http://www.naturalengland.org.uk/Images/wml-q12_tcm6-4116.pdf.

E4.1 Habitat/site management and maintenance:

Is any specific post-development habitat management and site maintenance planned? If 'Yes' include the following:

- The period (years and months) for which habitat management and maintenance will take place. Ensure that this is consistent with the post development works detailed in section **E5b** of the **Work Schedule document, WML-A35a-E5a&b**.
- Detail what will be undertaken in terms of habitat management and site maintenance required to ensure long-term security of the dormouse population. Ensure this relates to **Figure E3**.

Habitat Management	Required?	What measures will be undertaken?	Timing i.e. first 5 years following completion of development
☐ No habitat management required			
Hedge management	Yes ☒ N/A ☐	The newly planted hedgerow and native species rich hedgerows will be on a 3 year cut cycle, maintaining the height to 3-4m.	The newly planted hedgerow will be managed for at least 5 years by the management company.
Woodland management	Yes ☐ N/A ☒		
Scrub management	Yes ☐ N/A ☒		
Other as specified:	Yes ☐ N/A ☒		

Site Maintenance	Required?	What measures will be undertaken?	Timing i.e. first 5 years following completion of development
☐ No site maintenance required			
Check success of establishment of new planting and take remedial	Yes ☒ N/A ☐	Any new plants will be replaced if they die during the 12 months. In addition, the	The newly planted hedgerow will be managed for at least 5 years by the

action if required		woodland will be assessed for its health and management will take place if needed.	appointed management company.
Maintain dormouse bridges / connecting structures in good condition	Yes ☒ N/A ☐	The trellis will be checked on a yearly basis to ensure the structure is still intact, still linked to adjacent hedgerows, and to replace any plant growth on the trellis, if necessary.	The trellis will be monitored for at least 10 years by the appointed management company.
Clear material in nest boxes to maintain condition	Yes ☒ N/A ☐	Any nests found in poor condition (dilapidated/rotting) will be removed during each monitoring check of the boxes. Any nest boxes that have become dilapidated or damaged will also be replaced.	Years 1 - 5 following completion of vegetation clearance
Other as specified:	Yes ☐ N/A ☒		

Provide further (brief) comments/explanation if required:

Note – for phased or multi-plot developments a separate habitat management and maintenance plan is required, which must be submitted with the master plan: see guidance on phased developments.

Important Advice:

Please include **Figure E4** as a separate figure to show which structures and habitats will be managed, maintained and monitored post development as part of your proposal – also see *section 1 "Map checklist" at the end of this document*).

E4.2 Population monitoring, habitat usage etc: Where required, please include details of:

- Timing – state the years and months post development monitoring or other will be undertaken. Ensure that is consistent with the post development works detailed in section **E5b** of the **Work Schedule document WML-A35a-E5a&b**.

Given the small extent of the clearance works, it is not considered any post development monitoring works will be required.

- The type of monitoring which will be undertaken (e.g. nut searches, nest tube/nest box survey, hair tubes, camera traps, etc) – include survey methods and equipment to be used as necessary.

N/A

- Specify which compensation/mitigation measures will be subject to monitoring (and ensure these are clearly referenced on **Figure E4**).

Note: any bridges or linking structures deployed must be monitored.

The two trellises will be monitored yearly with the use of nest boxes on either side of the structures, one set in the hedgerows between the structures and a small number adjacent to the structure (see **Figure E4**).

Please note that it will be a requirement of the licence to undertake remedial action should monitoring identify that further management/maintenance is required of any compensation/mitigation measure provided (e.g. dormouse nest boxes or bridges/linking structures) to ensure that they are working effectively and are fit for purpose.

Important advice: Please always consider whether any *post development* monitoring effort should be staggered over alternate years in cases where use of the compensation measures may not occur in the same year of provision.

E4.3 Mechanism for ensuring safeguard of mitigation/compensation and post-development management, maintenance and monitoring works:

Please explain what mechanism is in place to ensure safeguard of mitigation/compensation provisions (e.g. Restrictive Covenant, clause to relinquish future development rights in S106 agreement, NERC Act agreement, explicit recognition of site in local planning documents, designation as County Wildlife Site or similar.) The need for this, and the type of mechanism, will vary with the scheme and impact. For substantial impact schemes, some mechanism is always required. If you offer no specific mechanism, explain how you believe the population will be free of threats as far as can be reasonably determined (the expectation of the granting of a licence should not be used for this purpose).

All mitigation/compensation and enhancement habitat will be protected via its inclusion within this MS which in turn will form part of the granted EPSL (a legally enforceable document). The measures included within this document were also in effect secured via planning conditions.

Explain how all post-development works (management, maintenance (including remedial action) and monitoring, as appropriate) will be ensured? Include a commitment that the monitoring, habitat management and maintenance work will be undertaken. Mechanism/s for ensuring delivery must be in place before applying for a licence (also see Section F).

The post-completion maintenance and management will be funded by, and the responsibility of the appointed management company.

E5 Timetable of works: Please complete the **Work Schedule document WML-A35a-E5a&b found on the 'dormouse' application form web page and append to your application pack.**

Important Advice: Please note that from July 2014 a separate Work Schedule is a mandatory requirement to support a new dormouse licence application when using this template.

F Declarations

If the mitigation/compensation area/s is/are not owned by the applicant, you must have consent from the relevant land owner(s). You must have also secured details of how any measures to maintain the population in the long term will be achieved (e.g. a legal agreement).

F1 Declaration Statement(s) – You must include the following declarations within your Method Statement and include the appropriate answer (Yes/No/Not applicable):

F1.1 Re: section E1 - I confirm that relevant landowner consent/s has/have been granted to accept dormice onto land outside the applicant's ownership:

Yes

F2.2 Re: section E2 - I confirm that landownership consent/s has/have been granted to allow the creation of the proposed compensation on land outside the applicant's ownership

Yes

F2.3 Re: section E3 - I confirm that consent/s has/have been granted by the relevant landowner/s for monitoring, management and maintenance purposes on land outside the applicant's ownership

Yes

Comments if applicable:

Important Advice:

Unsecured consents statement:

If you have been unable to secure consents for any of the three declarations please explain why and detail any plans you have in place to obtain the consent(s) or provide details of any right(s) or agreement(s) that will enable the lawful implementation of the proposed mitigation, compensation and monitoring. Failure to provide the appropriate landowner consents means that the Method Statement is unlikely to meet the requirements for the FCS test to be met. It is therefore in your interest to ensure that the appropriate consents have been secured *before* applying for a licence.

G References: List any references cited, and include credits for source information.

H Annexes (supporting documents please append to your application pack)

H1 Pre-existing survey reports;

H2 Raw survey data.

I Check list of figures to be submitted with each Dormouse Method Statement

With your Method Statement and supporting documents please submit the following maps/figures – see table below. Note that some can be included within the Method Statement itself (if preferred) and others must be submitted individually (i.e. separate documents).

Maps/Figures must include the title, site name as referenced on your application form, date and figure reference. If a grid reference is more applicable (e.g. a dormouse bridge is being provided please include this). Include a scale bar (appropriate to the situation e.g. 100m on site maps, 1km on location maps) and direction of North etc.

Additional maps, photographs or diagrams should be included where necessary to adequately explain the scheme.

Figure reference	Mandatory as will be included in the dormouse licence, if applicable	Mandatory for assessment purpose only, but will not be included in the dormouse licence	What it must show (also see details above on site reference, dating and naming).
Figure B2.1	Yes, if the application is part of a phased or multi-plot development where more than 1 licence is required	-	Master plan overview- note – this is not the same as a master plan document, for which you should follow the guidance as stated in section B2.1.
Figure B2.2	-	Yes, if applicable	Locations of other nearby dormouse licensed sites, or sites which will be impacted on by future development.
Figure C5a	-	Yes	Location map at an appropriate scale for the application (often 1:50,000 or 1:25,000)
Figure C5b	-	Yes	Survey area showing all habitats that are within the survey area and distinguishing those that were surveyed and those that were not. Aerial photographs should be provided where possible (ensure you have permission to use copy righted maps). If boxes or tubes were used or transect/quadrat routes, ensure that these routes are indicated as appropriate.
Figure C6	-	Yes	Survey results - provide clear, annotated and cross-referenced maps/plans/photographs to show the survey results (location of nests/dormice, etc).

			Ensure Figure is at a suitable scale to show the results.
Figure D	Yes	-	Impacts plan – map/figure to show impacts and where licensable works will take place: clearly indicate areas of habitats and habitat types to be impacted by the works (specify whether damage, and temporary impacts, destruction or disturbance will occur).
Figure E2	Yes	-	Locations and habitats where all capture and exclusion activities will be undertaken (ensure this is clearly labelled and consistent with other mandatory maps/figures). Indicate direction of displacement with arrows.
Figure E3	Yes – depending on proposals more than one figure may be required – particularly if the proposal is large or complicated or linking structures are provided	-	Specifications for mitigation / compensation Mitigation / compensation figures must show all habitat creation, restoration/enhancement, indicate where boxes will be erected etc. For development projects, show the final development layout within the site. Non-standard structures: Include design and dimensions for dormice bridges / other linking structures and materials to be used etc and provide an 8-figure grid reference for each structure.
Figure E4	Yes – when monitoring and maintenance will be included in the licence	-	Monitoring, management and maintenance map. Please indicate the specific structures and habitats that are to be managed, maintained and monitored as part of this licence proposal. Ensure that they are correctly referenced and are consistent with other parts of the Method Statement and figures.