



CelticEcology

**LAND AT CROSS CARDIFF ROAD / CROSS COMMON ROAD  
DINAS POWYS, VALE OF GLAMORGAN:**

**PROPOSED HOUSING DEVELOPMENT**

**DORMOUSE LICENCE METHOD STATEMENT**

**SEPTEMBER 2016**

Edenstone Homes Ltd  
First Floor  
Building 102  
Wales One Business Park  
Magor  
NP26 3DG



Celtic Ecology  
Council Offices  
Newport Road  
Bedwas  
Caerphilly  
CF83 8YB  
[info@celtic-ecology.co.uk](mailto:info@celtic-ecology.co.uk)

Page intentionally left blank

DRAFT

## EDENSTONE HOMES LTD

Land at Cardiff Road / Cross Common Road, Dinas Powys: Proposed Housing Development

Dormouse Licence Method Statement

Document control

Issue	Stage	Author	Checked	Approved	Date
1	DRAFT FOR COMMENT	HD	JK	HD	07.09.2017

Contents Amendment Record

This report has been issued and amended as follows:

Issue	Revision	Description	Approved	Date
1	A	Amendments to text & mitigation areas	HD	00.09.2017

### Disclaimer

No part of this report may be copied or reproduced by any means without prior written permission from Celtic Ecology. If you have received this report in error, please destroy all copies in your possession or control.

This report has been prepared for the exclusive use of the commissioning party and unless otherwise agreed in writing by Celtic Ecology, no other party may use, make use of or rely on the contents of the report. No liability is accepted by Celtic Ecology for any use of this report, other than for the purposes for which it was originally prepared and provided.

Opinions and information provided in the report are on the basis of Celtic Ecology using due skill, care and diligence in the preparation of the same and no explicit warranty is provided as to their accuracy.

**CONTENTS**

Background and Supporting Information ..... 1

A Executive Summary. .... 1

B Introduction ..... 2

C Survey and site assessment ..... 4

D Impact assessment (without mitigation) ..... 6

Delivery Information – Mitigation, compensation and monitoring ..... 8

E Works to be undertaken ..... 8

F Post-development site safeguard ..... 12

G Timetable of works ..... 13

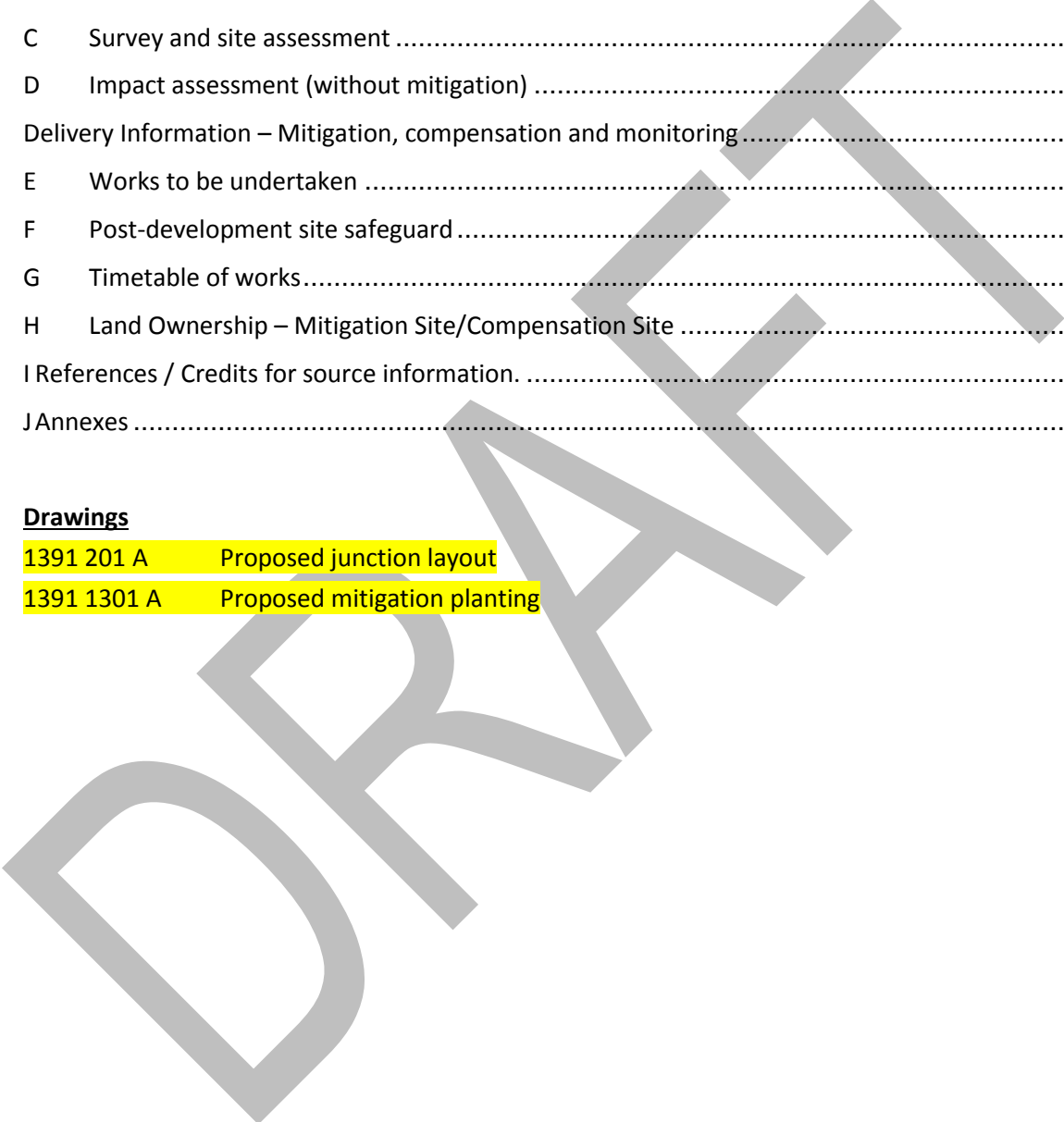
H Land Ownership – Mitigation Site/Compensation Site ..... 14

I References / Credits for source information. .... 14

J Annexes ..... 14

**Drawings**

- 1391 201 A Proposed junction layout
- 1391 1301 A Proposed mitigation planting



## **Background and Supporting Information**

### **A Executive Summary.**

As part of the proposed realignment of Cross Common Road and its junction with Cardiff Road in Dinas Powys there is a requirement to remove two sections of hedge: one on Cardiff Road and one on Cross Common Road (Figures 1 & 2; drawing 1392-201 SEPT). This will result in the functional loss of a further section of hedge that might be used by dormice (*Muscardinus avellanarius*). In addition, the land adjacent to Cardiff Road will be put forward for planning permission to construct up to 50 new private dwellings.

Outline planning permission was sought and obtained from the Vale of Glamorgan Council for the construction of 50 dwellings(2015/00392/OUT) dated 10<sup>th</sup> July 2017. Planning permission has been sought and obtained discharge of all conditions and reserved matters (2017/00746/RES) dated XXth XXXX 2017. This will require the removal of approximately 0.475ha of vegetation (trees and scrub) which has the potential to support dormice.

The presence of dormice in the hedges around the site has been assumed following the discovery of evidence of dormice in a development approximately 600m to the north east which is connected to the land subject of this application by woodland and hedgerows (as communicated to the development team by the Vale of Glamorgan ecologist). Agreement from Natural Resources Wales and the Vale of Glamorgan Council led to there being no requirement for a specific dormouse nest tube survey as long as the presence of dormice was assumed with appropriate mitigation for them being put in place.

Accordingly, as the presence of dormice is being assumed due to the site being well connected to other known habitat the hedgerow under consideration has the potential to act as a dispersal route and foraging area for dormice. Therefore, this method statement has been produced to explain the scheme and provide justification for and detail the methodologies proposed to ensure that the removal of sections of the hedgerow on the site do not adversely affect dormice and show that there will be no detriment to the favourable conservation status of dormice as a result of the proposed work.

#### **In summary:**

- 1) It is considered that the hedgerows and scrub are likely to be used by dormice for nesting, dispersal and foraging behaviour; and
- 2) That appropriate mitigation will be put in place elsewhere within close proximity to the development site which will ensure the provision of replacement ecologically functional habitat through the construction and operational phases of the development.

## **B Introduction**

### **B.1 Background to activity/development**

There is a need for additional housing within the Vale of Glamorgan. To this end, the Vale of Glamorgan Council identified a number of areas for housing in the Vale of Glamorgan in their Deposit Local Development Plan 2011 to 2026 (progressing to formal adoption); one of the identified sites is on the land adjacent to Cardiff Road and Cross Common Road in Dinas Powys.

Located on the south western limits of Dinas Powys, the whole proposed development site (road realignment and housing area) is approximately 2.16ha in area. Outline planning permission (2015/00392/OUT) for a housing development on land at Cardiff Road / Cross Common Road, Dinas Powys was approved by the Vale of Glamorgan Council Planning Committee (on 10<sup>th</sup> July 2017); a Reserved Matters application (2017/00746/RES) was submitted and approved by the Vale of Glamorgan Council (XXth XXXX 2017). The project requires the removal of 0.475ha (4750m<sup>2</sup>) of scrub and trees which are assumed to provide dormice with sheltering, foraging and breeding habitat.

The project is linked to an already completed road realignment of a section of Cross Common Road to provide a new junction access with Cardiff Road immediately south of Cadoxton River avoiding the existing bridge. The road realignment was considered necessary to provide a significant improvement to the highway network in terms of both vehicle and pedestrian movements and safety which could not be achieved solely with a replacement bridge structure. This project required the physical removal of 489m<sup>2</sup> (0.0489ha) of hedgerow and scrub (a linear length of approximately 125m). There was also a requirement to temporarily clear a total of 18m<sup>2</sup> of hedge alongside Cardiff road to enable the maintenance of two man holes. This brought the total physical clearance to 0.0507ha. This will result in the functional loss to dormice of 180m of hedgerow (≈0.0824ha). A development licence in respect of dormice was sought and obtained (licence number 73340:OTH:EPS:2016). This project has now been completed.

The completion of the housing development will permit the Vale of Glamorgan Council to meet its housing targets and provide much needed housing in the Dinas Powys area.

This Method Statement is solely for the purposes of the housing development scheme.

In summary, there will be a total loss (both physical and functional) of ≈0.475ha (4750m<sup>2</sup>) of suitable dormouse habitat.

#### **Site description**

The site of the housing development project is approximately 2.16ha in size and is located in Dinas Powys, south west of Cardiff (centred on NGR ST 154704; Figures 1 & 2 at section C.4 below). The completed road realignment site splits the housing area into two at its northern extent. The land is comprised of poor semi improved grassland, currently used as occasional horse turnout, with overgrown hedgerows as field boundaries to the north, east and west. The boundaries are comprised of bramble (*Rubus fruticosus*), blackthorn (*Prunus spinosa*), hazel (*Corylus avellana*), elder (*Sambucus nigra*), hawthorn (*Crataegus monogyna*), sycamore (*Acer pseudoplatanus*) and pedunculate oak (*Quercus robur*).

An area of woodland, Shortlands Wood (designated as a Site of Importance for Nature Conservation (SINC) by the Vale of Glamorgan) is immediately adjacent to the site's south eastern boundary. To the east are open semi-improved fields with overgrown mature unmanaged hedges. To the west of the site is the A4055 Cardiff Road which runs parallel with the Cadoxton River and neighbours Parc Bryn-Y-Don which again provides relatively good connectivity to the wider landscape to the west. North of the site is Dinas Powys, a large built up residential area.

### **B.2 Full details of proposed works on site that are to be covered by the licence**

An outline planning application (2015/00392/OUT) was approved by the Vale of Glamorgan Council on 10<sup>th</sup> July 2017 with the subsequent Reserved Matters application (2017/00746/RES) covering the detail of the

housing development being approved by the Vale of Glamorgan Council planning committee on XXth XXX 2017.

To enable the housing development, there is a requirement to clear an amount of functional dormouse habitat (trees and scrub) from the site. This will result in the physical loss of 0.475ha of scrub vegetation and 10 trees / groups of trees. It may not be possible to translocate all the removed vegetation as a large part of it is bramble scrub; therefore, there will be an area of planting within the proposed mitigation area.

The vegetation will be cleared as follows:

1. There will be no clearance works undertaken during the breeding bird season (generally considered to be March – September).
2. There will be a detailed search of both above ground vegetation and ground layers by the supervising ecologist immediately prior to the above ground clearance to check for animals / nests. Animals found will be able to escape to adjacent retained sections of hedgerow. In the unlikely event that any dormouse nests are found, they will be placed in a dormouse box positioned in the nearest section of retained vegetation.
3. Immediately following the ecologist's search, clearance will begin at the western edges of the site. Clearance will be directional, progressing in an easterly direction across the site. Clearance will be carried out using hand tools (chainsaws, pole saws and brushcutters) only. All clearance operations will be supervised by the licensed ecologist. Above ground vegetation will be cut to a minimum height of 500mm. No more than 500m<sup>2</sup> of scrub will be removed in any one day. Trees will be removed last to avoid crushing scrub vegetation.
4. Ground layer vegetation will then be removed under the direct supervision of the licensed ecologist to check for the presence of dormice and other animals, particularly other small mammals, great crested newts and reptiles.
5. All and any woody hedgerow vegetation that is suitable for translocation will be translocated to the mitigation planting area. Any and all gaps in the mitigation area will be made up with new planting.
6. Following the clearance of above ground vegetation, the ecologist will check the cleared areas for any dormice, great crested newts, reptiles and other small mammals which may be affected by any ground breaking operation.
7. Ground breaking operations will only be permitted once the vegetation has been cleared and the ecologist has given permission to carry on.
8. This methodology will prevent adverse impacts as a result of the clearance on dormice, great crested newts, breeding birds, reptiles and other small mammal species.

Vegetation translocation methodology:

- To compensate for the inevitable loss of roots the donor site vegetation will be cut back to approximately 0.5m above ground level prior to removal. This coppicing will make the vegetation easier to lift and handle. It is considered that although an 'instant' vegetation effect will not be possible, the probability of the translocation being successful is high and that the time taken for reestablishment will be significantly quicker than by using new planting with re-growth from the base of the translocated plants expected to reach the original height within 3 - 5 years of translocation;
- The vegetation will be removed and transported to its new location using appropriately sized machinery with appropriate buckets fitted. Each section will be translocated to its new location immediately upon lifting. This will avoid roots, particularly fibrous roots, becoming desiccated;
- The replanting location (translocation receptor site) will have been prepared prior to the commencement of the ground breaking exercise. This will comprise a trench mirroring the donor site's

excavation depth. The base of the trench will be broken up to allow for free drainage and the quick establishment of new roots;

- Loose topsoil will be placed around the plant roots as they are positioned into the trench;
- Firming-in of the plants will be undertaken to ensure that air pockets do not exist around the roots that could prevent nutrient and water uptake;
- Immediately following the translocation, the vegetation will be watered-in. This will assist in soil settlement around the roots;
- All operations will be undertaken under the guidance of a suitably experienced ecological clerk of works (who must hold a dormouse licence or be an accredited agent of a licence holder);
- For a minimum of two years following the translocation the vegetation will be watered during periods of excessive dry weather and any gaps will be in-filled with sapling shrubs and trees (as per the species mix on drawing 1391 1301 A);
- Any and all lighting will be directed away from hedgerows, woodland and scrub areas, and in particular the habitat corridors to reduce light pollution and disturbance to dormice;
- Protective fencing will be required to prevent any possibility of damage until the mitigation area is fully established; and
- Management of retained, translocated and newly planted vegetation will be sympathetic to dormice i.e. there will be no intensive flailing of hedges or aggressive scrub and woodland management.

### **B.3 Actions requiring licensing**

A licence is required to remove and translocate vegetation which it is assumed will provide dormice with places of shelter and resting. The licence is also required to be able to move any animals found to a place of safety in the adjacent retained hedgerow. Therefore, the actions which will require licensing are the disturbance, capture, and translocation of animals and the disturbance to and destruction of habitat which has the potential to provide breeding sites, resting places and places of shelter.

However, it is considered that potential for dormice to be present is likely to be low.

If a breeding bird's nest is present, work will be delayed until such time as the nest is vacated naturally.

## **C Survey and site assessment**

### **C.1 Existing information on the dormice at the survey site**

There are no records within the biological records data search of dormice from the specific location of the proposed work or within 4500m.

### **C.2 Statutory sites notified for the species (SSSIs) within 10km**

There are no known statutorily designated sites within 10km which are notified for dormice or include them within their citations.

### **C.3 Objectives of any specific survey**

No specific survey was undertaken following consultation with Natural Resources Wales and the Vale of Glamorgan Council's ecologist. This was due to assuming the presence of dormice on the site as a result of the findings of a dormouse survey undertaken on a proposed development site approximately 600m to the



north east which identified the presence of dormice. The habitat connections are good between the two sites.

**C.4 Scaled plan/map of survey area**

Figure 1 - site location



Figure 2 - Aerial view of the overall development site with the area of the housing development highlighted yellow.



Please refer to drawing **1392-201 SEPT** for the exact location of the housing layout.

#### **C.5 Site/habitat description (relevant to dormice)**

In addition to the site description provided at section B.1 above, please refer to the attached Preliminary Ecological Appraisal (Celtic Ecology, February 2015) from which this extract is taken:

“It should be noted that the hedges, particularly that along the Cardiff Road boundary are generally thin and gappy and while the canopy is continuous, this lower density of hedge material reduces the amount of suitable available habitat. As a result, the site is regarded as being of **low** potential importance to dormice.”

Please also refer to the attached Ecological Mitigation Strategy (Celtic Ecology, January 2016) and Ecological Design Strategy (Celtic Ecology, August 2017).

#### **C.6 Field survey(s)**

None undertaken as presence of dormice in low densities is assumed.

#### **C.7 Survey results**

None.

#### **C.8 Interpretation/evaluation of survey results**

Not applicable.

### **D Impact assessment (without mitigation)**

#### **D.1 Short-term impacts: disturbance**

There will be a potential **minor short term adverse** impact on dormice due to disturbance from vegetation clearance (cutting and removal) and excavation and machinery involved in house construction activities. These latter operations may result in vibration, noise and dust.

#### **D.2 Long-term impacts: habitat modification**

It is anticipated that there will be an initial **moderate medium term adverse** impact due to habitat loss prior to a reversal over time as a result of the proposed mitigation followed by a **long term positive** impact as a result of habitat planting and improvements.

#### **D.3 Long-term impacts: habitat loss**

There will be no net loss of habitat suitable for dormice over the licence period. There will be disruption initially due to removal of part of the hedgerow, the effects of which will decrease over time as new planting matures and habitat improvements develop.

- 1) **No impact** at a regional level
- 2) **No impact** at a local / county level
- 3) **Neutral/slight impact** at a site level

#### **D.4 Long-term impacts: fragmentation and isolation**

There will be a temporary (until translocated, replacement and newly planted vegetation matures) fragmentation due to part of the hedge being removed and the overall loss of hedgerow functionality.

There is a potential for long term fragmentation and isolation as there will be a loss of functionality of hedgerow not required as part of the road realignment and therefore retained. However, it is anticipated

that this retained section of hedgerow will be lost the housing development in the future, the mitigation for which will negate all fragmentation and isolation by providing replacement connective habitat.

#### **D.5 Post-development impacts e.g. disturbance, predation**

This work is being completed in line with the mitigation requirements of housing development being implemented as per the attached Ecological Mitigation Strategy and Ecological Design Strategy.

However, as a standalone project, it is anticipated that the housing project will not result any post development impacts as a result of habitat loss as mitigation (replacement planting) will be provided. However, it is possible that there may be anthropogenic impacts on the retained and newly planted habitats and habitat improvements.

#### **D.6 Predicted scale of impact on species status at the site, local county and regional levels**

It is anticipated that the impacts will be as follows:

- 1) **Neutral impact** at a UK level
- 2) **Neutral impact** at a regional level
- 3) **Neutral impact** at a local / county level
- 4) **Minor short term** (5 years) impact at a site level

## Delivery Information – Mitigation, compensation and monitoring

### E Works to be undertaken

This section is limited to the housing development project only. All work required for the road realignment project was covered by a separate licence and method statement.

#### **E.1 Site clearance methods**

The trees and scrub will be removed as follows:

1. Trees will be felled on completion of the removal of all other vegetation to prevent crushing scrub in which dormice may be present.
2. Trees will also be subject of a pre-commencement check for the presence of bats in the form of a ground based assessment followed, if necessary, by a dawn return to roost survey in the event that the trees in question now provide potential roost features. These features may also provide dormice with
3. There will be a detailed search of both above ground vegetation and ground layers by the supervising ecologist immediately prior to the above ground clearance to check for dormice and / or nests. Animals found will be able to escape to adjacent retained sections of vegetation. In the unlikely event that any dormouse nests are found, they will be placed in a dormouse box positioned in the nearest section of retained vegetation.
4. Immediately following the ecologist's search, clearance will begin at the western edge of the site. Clearance will be undertaken in an easterly direction. Clearance will be carried out using hand tools (chainsaws, pole saw, brushcutters etc.) only. All clearance operations will be supervised by the licensed ecologist. Above ground vegetation will be cut to a minimum height of 500mm. No more than 500m<sup>2</sup> of vegetation will be removed in any one day.
5. Following the clearance of above ground vegetation, the ecologist will check the cleared areas for any dormice, great crested newts, reptiles and other small mammals which may be affected by any ground breaking operation.
6. Ground layer vegetation will then be removed under the direct supervision of the licensed ecologist to check for the presence of any dormice, great crested newts, reptiles and other small mammals.
7. Ground breaking operations will only be permitted once the vegetation has been cleared and the ecologist has given permission to carry on. (Coppicing may only be undertaken between September - May (inclusive)).
8. This methodology will prevent adverse impacts on all wildlife as a result of the clearance.

Vegetation translocation methodology:

- To compensate for the inevitable loss of roots the donor site vegetation will be cut back to approximately 0,5m above ground level prior to removal. This coppicing will make the vegetation easier to lift and handle. It is considered that although an 'instant' vegetation effect will not be possible, the probability of the translocation being successful is high and that the time taken for reestablishment will be significantly quicker than using new planting with re-growth from the base of the translocated plants expected to reach the original height within 3-5 years of translocation;
- The vegetation will be removed and transported to their new location using appropriately sized machinery with appropriate buckets fitted. Each section will be translocated to its new location immediately upon lifting. This will avoid roots, particularly fibrous roots, becoming desiccated;
- The replanting location (translocation site) will have been prepared prior to the commencement of the ground breaking exercise. This will comprise a trench mirroring the donor site's excavation depth. The

base of the trench will be broken up to allow for free drainage and the quick establishment of new roots;

- Loose topsoil will be placed around the plant roots as they are positioned into the trench;
- Firming-in of the plants will be undertaken to ensure that air pockets do not exist around the roots that could prevent nutrient and water uptake;
- Immediately following the translocation the translocated plants will be watered-in. This will assist in soil settlement around the roots;
- All operations will be undertaken under the guidance of suitably experienced ecological clerk of works (who must hold a dormouse licence or be an accredited agent of a licence holder);
- For a minimum of two years following the translocation the vegetation will be watered during periods of excessive dry weather and any gaps will be in-filled with sapling hedgerow trees and shrubs (hazel, blackthorn & hawthorn);
- Any and all lighting will be directed away from all mitigation and retained woodland and scrub areas, and, in particular, the habitat corridors to reduce light pollution and disturbance to dormice (please refer to the attached sketch showing the indicative street lighting proposals. Baffles / shields will be installed as necessary to ensure that there will be no light spill onto the mitigation and retained vegetation);
- Protective fencing (post and stocknet) will be required to prevent any possibility of damage until the receptor and mitigation area is fully established. This will be installed immediately following the translocation;
- Management of retained, translocated and newly planted vegetation and other habitats will be sympathetic to dormice i.e. there will be no intensive flailing of hedges or aggressive scrub and woodland management wherever this does not conflict with other regulatory requirements (e.g. highways). The management will be in accordance with the recommendations contained in *Hedgerows a guide to wildlife and management* (PTES) and *Hedgerow management, dormice and biodiversity* (English Nature, Report 454, 2002); and
- The vegetation translocated as part of this licence application will be allowed to re-establish itself before management is implemented. The retained hedges will be extended by gapping up and planting alongside their length to increase its width by an additional 2m. The management of the hedges will maintain them at a minimum height of 3m. Cutting of roadside faces of hedges will be on annual basis for health and safety reasons. Trimming of other faces of hedges will be undertaken no more than once every two years with only half the hedge (one side and half the top width) being cut in any one year. Management will likely utilise tractor mounted machinery. Oscillating blade cutters will be used in preference to flails.

## **E.2 Dormouse habitat**

### **E.2.1 In-situ retention of habitat**

All site boundary vegetation other than that scheduled for removal will be retained.

### **E.2.2 Modification of existing habitat**

Please refer to Figure 3 below.

The existing boundary hedge alongside Cardiff Road is thin and gappy. This hedge will therefore be gapped up and provided with additional planting to make the hedge denser and ensure that the existing width is maintained along the length of the hedge. In addition, the hedge will be thickened by 3m on the side facing

the housing development; this will be achieved by the planting of native hedge species resulting in an additional 0.12ha of new habitat creation.

Shortlands Wood (in the ownership of the Lee Estate) will be managed to benefit dormice. This will include (but not necessarily be limited to) the following actions:

- New perimeter fencing;
- Removal of non-native tree and shrub species (primarily thinning against sycamore and beech);
- Coppicing of trees and understorey to create a more varied age structure and improve the habitats (particularly understorey, shrub and ground layers); and
- Coppicing woodland edge vegetation to create a graded ecotone rather than the abrupt transition currently in place.

This will result in an additional 1.3ha of habitat improvement to directly benefit dormice.

Figure 3 – Proposed modification of existing habitats for proposed future housing development (hedge modifications outlined yellow; management to Shortlands Wood outlined red)



The necessity for any additional habitat management will be determined once the proposed mitigation has developed and in line with further conservation guidelines / new advice.

### **E.2.3 New habitat creation**

Please refer to Figure 4 for details of the location of proposed habitat creation.

There will be a wildlife corridor across the site (approximately 0.1ha) which will provide a link to replace that lost against Cross Common Road. This will involve new planting of shrubs and semi-mature trees.

A further area of new planting (0.2ha) will be created opposite the mitigation for the road realignment site.

Figure 4 – proposed new planting mitigation for the proposed housing development (outlined yellow; proposed pond / attenuation basin outlined blue) (Planting area for road-realignment outlined red)



#### New planting management:

- All areas identified for and subject of new and replacement planting and habitat improvement will be managed in accordance with the recommendations contained in *Hedgerows a guide to wildlife and management* (PTES) and *Hedgerow management, dormice and biodiversity* (English Nature, Report 454, 2002) i.e. there will be no intensive flailing of hedges or aggressive scrub and woodland management wherever this does not conflict with other regulatory requirements (e.g. highways).
- For a minimum of five years following any new planting, the planting will be inspected at regular intervals (1 check per week for the first month; thereafter 2 checks per month for 1 month then 1 check per month until October 2017. Thereafter, vegetation will be checked once per year in the summer (July)). Any and all losses will be replaced as soon as possible and subject to appropriate management to ensure its establishment;
- Protective fencing will be required to prevent any possibility of damage until the vegetation is fully established. This will be installed immediately following the new planting;
- Any and all lighting will be directed away from retained, newly planted and improved habitats, and in particular the wildlife corridors across the site, to reduce light pollution and disturbance to dormice. The use of shields and baffles may be required;
- All new planting, gapping up etc. implemented as part of this licence application will be allowed to establish itself before management is implemented. The management of the hedge alongside Cardiff Road will maintain it at a minimum winter height of 3m (excluding existing retained trees). Cutting along the western side and top will potentially be on annual basis as it fronts onto Cardiff Road. Trimming on the eastern side will be undertaken no more than once every two years (or less frequently wherever possible). Management, where tractor mounted machinery is required will utilise oscillating blade cutters in preference to flails).

#### E.2.4 Habitat losses and gains summary table

Habitat	Loss (ha)	Gain (ha)
Hedgerow	-	0.12
Scrub / trees	0.475	0.1
New scrub and woodland planting	-	0.2
Woodland management	-	1.3
Totals	0.475	1.72
<b>TOTAL PHYSICAL HABITAT GAIN (ha)</b>		<b>-0.55</b>
<b>TOTAL INCLUDING IMPROVEMENTS (ha)</b>		<b>1.72</b>

This represents a total gain to loss ratio of nearly 4:1.

#### E.2.5 Scaled maps/drawings to show proposals for mitigation

Please refer to Figures 3 above and drawing XXXX.

#### E.3 Mechanisms for ensuring delivery of mitigation and compensation measures

No work to clear or remove vegetation will be undertaken without the licensed ecologist being present.

All site work will be supervised by a suitably experienced and licensed ecologist. All hand searching for dormouse nests and animals will be undertaken by the ecologist.

All site personnel will be given a site induction which includes an ecological section detailing all measures to be implemented as part of the works, particularly all matters relating to dormice and this method statement. All those attending will be required to sign an ecological induction record sheet

#### E.4 Mitigation contingencies

In the unlikely event that any nests are found, nests will be placed in a dormouse box positioned in the nearest section of retained vegetation.

#### E.5 Biosecurity risk assessment

No non-native invasive species are present on the donor site.

### F Post-development site safeguard

#### F.1 Habitat/site management and maintenance

The areas of vegetation to be removed are on land owned and retained by Edenstone Homes Ltd. All matters relating to the mitigation planting will be undertaken by Edenstone Homes Ltd and their appointed contractor / sub-contractor. Part of the mitigation planting area and the Shortlands Wood management (mitigation) area is on land owned by the Lee Estate, which has agreed this use of the land (see attached letter).

Edenstone Homes Ltd and all successors in title will be responsible for the management and maintenance of the mitigation planting. The responsibilities include financial control and selection of appropriate sub-contractors associated with the housing development mitigation and aftercare for the duration of the project. This has the agreement of the landowner (the Lee Estate).

The monitoring of retained and enhanced vegetation and new planting will be delivered in combination by the named ecologist and the appointed (by Edenstone Homes Ltd and all successors in title) landscape sub-contractor.



On completion of the housing development, the mitigation will be managed by Edenstone Homes Ltd (and all successors in title) for a period of 5 years when the management will revert to the Private Management Company or the Vale of Glamorgan Council (or other appointed agent/ body). The Lee Estate (and / or successors in title) will assume the responsibilities for implementing any and all mitigation on land retained by the Lee Estate including that within Shortlands Wood under this method statement and licence.

## F.2 Population and habitat monitoring

Monitoring will be undertaken.

New planting: post or tree mounted dormouse nest boxes will be installed at an equivalent rate of 1 every 20m 1m inside the boundaries of all new planting areas. These will be erected in January / February 2018 or as soon as the planting has become sufficiently established.

The boxes will be monitored three times per year (May, July and September) every year for 5 years following installation or as soon as the named ecologist determines that the vegetation has become sufficiently established that dormice are likely to use them; in this latter case, the 5 year monitoring period will commence at this later date. The boxes will be maintained by Edenstone Homes (and any / all successors in title) and the Private Management Company until the monitoring period is completed. Replacement boxes will be provided as necessary / recommended by the Named Ecologist.

## F.3 Post-development mitigation contingencies

It will be the condition of the created habitats and its links to other suitable habitats which will determine the success (or otherwise) of the proposed mitigation. Therefore, the condition of the created, retained and enhanced habitat will be monitored by the Named Ecologist and other agents appointed by Edenstone Homes Ltd, the Private Management Company and all successors in title.

All planting which fails will be replaced as soon as possible (given seasonal planting constraints).

The management of the planting and adjacent habitat will be examined to determine whether any suitable alterations / improvements in management can be made.

## F.4 Mechanism for ensuring delivery of post-development works as appropriate

The proposed post development work will be the responsibility of both Edenstone Homes Ltd (and all successors in title), the Private Management Company and the Lee Estate. All parties have agreed to this as per the attached letter and have agreed to the way in which the responsibilities associated with this method statement and licence are implemented and transferred to successors in title in the future. Edenstone Homes Ltd will ensure that the Private Management Company is made aware of all responsibilities under this method statement and licence.

The Lee Estate will ensure that any and all successors in title to the mitigation areas and Shortlands Wood are aware of the duties and responsibilities of this method statement and licence and to ensure that any such successor in title abides by the duties and responsibilities imposed on them by this method statement and licence.

## G Timetable of works

Proposed activity	Timing	Responsible person / body / notes
Search of hedge by ecologist	November 2017 (or immediately on receipt of licence)	Licensed ecologist / Edenstone Homes Ltd (EHL)
Preparation of translocation receptor & new planting area (fencing, soil preparation)	November 2017 (or immediately on receipt of licence)	Licensed ecologist / EHL

<b>Proposed activity</b>	<b>Timing</b>	<b>Responsible person / body / notes</b>
Coppicing of hedge to 500mm	November 2017 (or as soon as licence is received)	EHL / licensed ecologist
Excavation of hedgerow roots and other vegetation	November 2017 (or as soon as vegetation is prepared)	EHL / licensed ecologist
Translocation of available / suitable hedgerow material	November 2016 (or as soon as vegetation is prepared)	EHL / licensed ecologist
Planting of new scrub area	November 2017; to be completed before end April 2018	EHL / licensed ecologist
Monitoring of new planting	Ongoing (immediately - 1 check per week for the first month; thereafter 2 checks per month for 1 month then 1 check per month until October 2018.	EHL / licensed ecologist
Erection of pole mounted dormouse boxes	From February 2018	EHL / licensed ecologist
Monitoring of dormouse boxes	3 times per year (May, July and September) 2017 (or as soon as vegetation becomes sufficiently established) - 2020 (5 years)	Licensed ecologist

## **H Land Ownership – Mitigation Site/Compensation Site**

### **H.1 Mitigation Site/Compensation Site Ownership**

The whole site is in the ownership and control of Edenstone Homes Ltd (the developer).

### **H.2 Mitigation Site/Compensation Ownership post construction**

The site will be owned by Edenstone Homes Ltd and all successors in title, including the Private Management Company. The delivery and maintenance of all mitigation by Edenstone Homes Ltd has been approved by the Lee Estate and will be in line with the Ecological Mitigation Strategy, Ecological Design Strategy and this method statement.

## **I References / Credits for source information.**

None.

## **J Annexes**

### **J.1 Pre-existing survey reports**

None

### **J.2 Raw survey data**

None.