



Habitat Management Plan (HMP)

Land adjacent to Laurel Cottage,
Ivinghoe Aston, Ivinghoe,
Buckinghamshire, LU7 9DF

For P & J Rayiru

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Final

Hardys Lodge Habitat Management Plan (HMP)

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Hardys Lodge Habitat Management Plan (HMP)

1.0 Background

Introduction

1.1 This Habitat Management Plan (HMP) has been prepared on behalf Philip and Jean Rayiru in respect of a scheme to demolish The Barn on land located adjacent to Laurel Cottage, Ivinghoe Aston, Ivinghoe, Buckinghamshire LU7 9DF. Demolition is required to make space for the construction of a replacement sustainable 3-bedroom dwelling, with new access.

1.2 This document has been prepared pursuant to discharge of the Scheduled Condition 5 of Planning Appeal Decision APP/J0405/W/22/3312749, which states that:

No development shall commence on site (including demolition, groundworks, site, or vegetation clearance) until a Construction Environment Management Plan (CEMP) and Habitat Management Plan (HMP) detailing, in full, measures to protect existing habitat during construction works and the formation of new habitat to secure habitat compensation and biodiversity net gain have been submitted to and approved in writing by the local planning authority. The details shall also include an implementation and maintenance strategy. The development shall thereafter be undertaken in accordance with the details as approved.

1.3 This document is one of a suite of documents that has been prepared to discharge Condition 5 and includes:

- recommendations for survey work required in advance of works beginning
- avoidance measures, to prevent damage or disturbance to ecological receptors
- site specific working practices to ensure that the ecological interests on site are protected and safeguarded as the site is prepared in readiness for construction
- mitigation and enhancement measures to secure an uplift of biodiversity value across the site
- management and maintenance, to ensure that all measures properly establish and are realised to their full potential.

1.1 Information in this HMP draws from documentation submitted in support of the application, as follows:

- a detailed Landscape Proposals Plan¹ and landscape specification² for the scheme. These relate to the existing site boundary vegetation and the future landscape proposals that will provide visual screening benefits and biodiversity enhancement measures.
- a Construction Environmental Management Plan³ (CEMP) to ensure that controls are in place to avoid ecological and environmental impacts during implementation of the consent.

¹ Leof Landscape, January 2024. Hardy Lodge, Ivinghoe Aston. Landscape proposals. Drawing number 2312-004-LL01

² Leof Landscape, January 2024. Landscape Specification. Hardy Lodge, Ivinghoe Aston. 2312-004-LS01

³ Mayer Brown, January 2024. Hardy Lodge, Ivinghoe, Aston. Construction Environmental Management Plan.

2.0 Scope of HMP

Baseline habitats

- 2.1 The Barn is located on the edge of a large open area of land currently used as lawned garden with established flower beds. It benefits from hedgerows and trees along its western, northern boundaries and partial hedgerow separating it from Laurel Cottage. These hedgerows and trees help screen the site from the surrounding village.
- 2.2 The western hedgerow is a double hedge with the outer hedgerow marking the original boundary and comprising old and gappy hawthorn. The inner hedge is approximately 10 years old, maintained at 2.5m high and comprises *Leylandii* conifer⁴.
- 2.3 An ecological impact assessment was not required for purpose of determining the application, so it is assumed that:
- the lawn is a residential garden lawn comprising species-poor amenity grassland of low ecological value, and;
 - the established flower beds sit within a residential context, are formally planted and are of low ecological value.
- 2.4 Nonetheless, the existing structure for demolition and the garden habitats present have the potential to support protected animal species. All necessary precautions must be undertaken to ensure that implementation of the consent does not implicate such a species.

Protected species

- 2.5 Construction of the replacement dwelling will result in the demolition of The Barn and removal of a small stretch of hedgerow to establish a new access.
- 2.6 No information is available to assess the potential of The Barn to support bat species. Neither is information available to assess whether dormouse are present in the area and/or whether the hedgerow for removal offers suitable habitat for this species.
- 2.7 It is established that the site lies within a red zone identifying a high potential for Great Crested Newts (GCN), a protected species and that eight ponds lie within 500m of the consented scheme, with connectivity to the site present through the existence of hedgerows and grassland. No survey work has been carried out to date on account of a neighbouring planning application having undertaken survey work

⁴ Information provided by the property owner.

for all ponds and which concluded that GCN were not present in April 2022. This conclusion can be considered to hold secure for up to 18 months post survey.

- 2.8 The garden habitats present across the site will provide breeding, feeding and roosting habitat for common garden bird species and potentially for common reptile species.

Implication for scope of HMP

Habitats

- 2.9 The consented scheme will result in the loss of amenity grassland to implement the proposed vehicular access, turning head and any utility connections and approximately 7m of a double hedgerow, comprising both native and ornamental species. The scheme offers potential for reinstatement of grassed areas using a native flowering lawn mixture, to benefit bees and other nectar loving insects. In addition, careful hedgerow planting has the potential to enhance and benefit the hedgerow remaining on site and the habitats that it can offer. Bat and bird boxes can offer further local habitat value.

Dormouse

- 2.10 Although rare in Buckinghamshire, records of dormouse do exist. As a species protected under the Conservation of Habitats & Species Regulations 2017 (as amended) (the Habitats Regulations), it is important to formally assess the site for this species, with the likelihood being that it can be screened out from further consideration.
- 2.11 A professional ecologist will undertake a data search to assess whether dormouse records are known from the locality. If local records are identified, the hedgerow will be assessed for its potential to support dormice and a dormouse survey will be carried out over the summer to establish the presence of this species if necessary. However, the likelihood is that the ecologist will be able to review the hedge in the light of available data to conclude that loss of the 7m hedgerow will not affect dormouse.
- 2.12 This HMP is prepared on the assumption that dormouse are not present on site. If, following review and survey of the site, dormouse is shown to be present, this HMP will be reviewed in the light of the findings and will be submitted back to Buckinghamshire Council to re discharge condition 5.

Bats

- 2.13 As for dormouse, all UK bat species and their roosts are protected under the Habitats Regulations and a licence is required from Natural England for any lawful development activities (such as consented demolition) that cannot avoid disturbing or damaging a roost.
- 2.14 A Phase 1 bat survey of The Barn is required before any demolition works can commence. This will establish whether the structure has the potential to support bats and will establish the need for Phase 2 bat surveys, which if required, determine the extent to which the building is used, and the species present if so. If a bat roost is identified as present, it will be necessary to work with an ecologist to apply for a licence that will allow the consented works to lawfully proceed.

Great Crested newts

- 2.15 Given the passage of time since survey work was completed to establish the absence of GCN in the eight waterbodies within 500m of the site, it will be necessary to review the GCN status of the site.
- 2.16 A professional ecologist will assess the habitats present within the red line and will carry out a GCN risk assessment. This will inform next steps and will establish whether there is a need to engage with Buckinghamshire Council's District Licensing scheme through NatureSpace⁵.
- 2.17 The previous but relatively recent negative eDNA results from the nearby waterbodies, it is unlikely that GCN will be an issue and this report is predicated on their assumed absence such that no further consideration is required. If further ecological work establishes that GCN must be considered as part of the scheme, this HMP will be updated to reflect and resubmitted as an updated discharge of Condition 5.

Breeding birds

- 2.18 The garden habitat, hedgerows and buildings present on site provide nesting habitat for wild birds. All wild birds are protected under the WCA 1981, whilst they are actively nesting or roosting. Section 1 of this Act, makes it an offence to kill, injure or take any wild bird, and to intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built. It is also an offence to take or destroy any wild bird eggs.

⁵ <https://naturespaceuk.com/district-licensing/>

2.19 The HMP sets out an approach to ensure that this protection is fully respected in the development of the site.

3.0 Construction: measures to avoid ecological impact

Introduction

- 3.1 This section sets out all working methodologies required to ensure that clearance of the site and subsequent construction activities have no impact on protected species or retained hedgerows and trees.

Protection of habitats, trees and hedgerows

- 3.2 Retained hedgerows and trees must be protected from damage through the construction process. A CEMP has been prepared detailing the measures to be taken. This must include:
- dust management techniques, inclusive of, but not restricted to damping down as required
 - the shielding and careful siting of the site compound and the implementation of a site speed limit within the development site
 - safe working methods and action plans to guard against pollution incidents
 - tree protection requirements as set out the CEMP, inclusive of:
 - protective barriers around all retained trees and hedgerows and the required specification
 - methods of working for arboriculturally sensitive locations
 - the briefing of site personnel
 - the storage and location of materials, and the location of compound cement mixing and washing points.
- 3.3 Implementation of the detailed requirements of the CEMP will be a contractual requirement of the principal contractor employed on site.

Protected species

Dormouse

- 3.4 Although dormice are not anticipated present on site, a formal assessment will be carried out by a professional ecologist to confirm. Assuming that this assessment concludes that dormice are not present hedgerow removal can proceed unconstrained (although still subject to the constraints imposed by the need to avoid impacts on breeding birds (see below)).
- 3.5 If however, investigation shows that dormouse are in fact present on site, then the hedgerow removal can only take place under the derogations provided by a European Protected Species (EPS) licence. This must be obtained by application to Natural England and works must be carried out in strict accordance with the

conditions of the licence. In this instance, this document will be updated to allow for the additional planting that will be required to mitigate impacts and will be resubmitted to the Council for re-discharge of Condition 5.

Breeding birds

- 3.6 Site clearance in advance of construction must be carried out to avoid disturbance to nesting birds. Vegetation clearance and building works should be conducted outside of the bird nesting season, considered to run from 1st March to end September. Where this is not possible, a suitably qualified ecologist must check potential nesting habitat immediately prior to clearance. Where nesting birds are encountered, clearance must be postponed until the nestlings have fledged. The active nest should be protected by a buffer zone to ensure that it is not disturbed by surrounding activity. The supervising ecologist will advise on the size of the buffer on a case by case basis, which will vary with species and location of nest.

Reptiles

- 3.7 The site will be made unsuitable for reptiles at the point that construction works are due to commence. All potential reptile habitat present on site will be made unsuitable through strimming. This is a precautionary approach to site clearance, and will ensure no reptiles are present within the works area during construction and will remove the risk of harm to individual animals. The works will be carried out as follows:
- the strim of potential reptile habitat will be carried out at an ambient air temperature above 10°C when reptiles are more mobile and will be carried out in a two strim cycle, with the first cut to 15 centimetres and the second to ground level. This cutting will take place in one direction towards the retained habitat.
 - all arisings from the cutting and clearance will be immediately removed from the works area to prevent any reptiles sheltering within it.
 - once work is complete, the habitat within the works area will be maintained at a short sward height to discourage reptiles from entering the works area.
 - materials will be kept off the ground through the use of skips or pallets to prevent reptiles using for shelter.

4.0 Establishment: mitigation and habitat creation measures

Introduction

4.1 This section sets out the detailed specification for those measures required within the build to secure biodiversity enhancements.

Overview: measures required to provide biodiversity enhancements

4.2 The consented scheme includes several biodiversity enhancements, some integral to the build, and others achieved through the delivery of landscape planting. All are specified on drawing 2312-004-LL01, appended to this document at Appendix 1.

4.3 The consented scheme will result in loss of 7m of native hedgerow to facilitate access and 369m² of amenity lawn. This will be offset by the following gains:

- 12m new hedgerow reinstatement in the area of the old stable block
- gapping up of 56m of existing, retained hedgerow
- creation of 26m² species-rich flowering lawn
- repair and improvement of 150m² of existing amenity lawn.
- 310m² native & wildlife beneficial tree, shrub & ground flora replacement for amenity lawn.
- x1 loggery, to provide decay habitat for invertebrates
- x1 bird boxes
- x1 bat box

4.4 This section sets out the specification for the installation/establishment of each.

Specific habitat enhancements to improve biodiversity

Hedgerow

4.5 Although a small loss of hedgerow will occur as a result of the providing access to the new dwelling, the scheme will improve the overall hedgerow habitat on site through:

- Reinstatement of 12m of hedgerow in the area of the old stable block with native species transplants pit (30-40cm) planted at 0.5m centres and in double rows. Transplants will be staked and protected with spiral guards. The native transplants should be planted during the winter months for optimal establishment and will comprise:
 - x5 Field maple *Acer campestre*
 - x5 Hazel *Corylus avellana*

- x30 Hawthorn *Crataegus monogyna*
 - x3 Common privet *Ligustrum vulgare*
 - x3 Honeysuckle *Lonicera periclymenum*
 - x3 Dog rose *Rosa canina*
 - x3 Guelder rose *Viburnum opulus*
- gapping up of 56m of existing, retained hedgerow at a rate of approximately 20% (c.11m of new planting) to provide a thicker hedge of greater structural diversity and habitat quality. The character of the hedge will be maintained through the use of Hawthorn transplants (60cm) pit planted at 0.5m centres. Planting will take place during the winter months to optimise establishment, with all planting staked and protected from damage with spiral guards.

Species-rich grassland habitats

4.6 The scheme will result in a loss of species-poor amenity grassland through direct impact of the new building (footprint) together with damage likely during the construction process. However, the scheme gives rise to the two opportunities for biodiversity enhancement: the species-rich repair of damaged grassland for retention and the creation of new species-rich grassland where previously there was none. Taking each in turn:

- 26m² of species-rich flowering lawn will be created to produce a low maintenance wildflower grassland. The mix used to be used is specified as: Flowering Lawn Seed Mix | British Wildflower & Grass Seed | Habitat Aid⁶ and is of guaranteed UK provenance.
- repair and improve quality to 150m² of existing amenity lawn. Any damage arising from construction of the new dwelling will undergo patch repair using the same species-rich flowering lawn mix as above. The remainder of the amenity grassland to be scarified and overseeded to improve quality. Again, the same seed mix as above should be used for this purpose.
- Seed will be sown in the early autumn or early spring onto fine raked ground of even tilth. Timing should be judged such that irrigation should not be necessary for establishment.

Other planting

4.7 The scheme provides opportunity for further biodiversity enhancement with the planting of 310m² native & wildlife beneficial tree, shrub & ground flora replacement for amenity lawn. The detail of the planting is specified on drawing 2312-004-LL01

⁶ <https://www.habitataid.co.uk/products/flowering-lawn-seed-mix>

and is based on a framework of native planting with a shrub and herbaceous understorey.

Built in enhancements

Bird nest boxes

- 4.8 One Vivara Pro Seville 28mm WoodStone Nest Box⁷ or similar, will be fixed to a mature tree to provide nesting opportunities for hole nesting species such as blue tits, tree sparrows, great tits, crested tits, coal tits and pied flycatchers.
- 4.9 The box should be located at least two metres off the ground with the direction of the entrance hole away from the prevailing wind and to which there is a clear flight path. The box should be located away from strong sunlight, so should have a northerly, easterly or south-easterly aspect. If possible, position the box with a slight downward angle to provide further protection from the rain. Annual cleaning is advisable but not necessary.

Bat box

- 4.10 Although not currently recorded from site, the site sits in a context of habitats that offer foraging opportunities and hedgerows that afford connectivity for common bat species.
- 4.11 One large multi chamber Woodstone bat box⁸ or similar will be erected on a tree retained as part of the scheme at a height of between 3 and 6m. This box will provide a suitable roosting space for a range of bat species, including Common, Soprano and Nathusius's pipistrelle, Brown long-eared bat, and Natterer's bat.

Loggery

- 4.12 One log pile using locally sourced wood will be created adjacent to a retained hedgerow to provide refugia and habitat for invertebrate and decay specialist species. the location of the loggery is shown on drawing 2312-004-LL01 (Appendix 1).

⁷ <https://www.nhbs.com/1sp-schwegler-sparrow-terrace>

⁸ https://www.nhbs.com/equipment?q=&hPP=60&idx=titles&p=0&fR%5Bdoc_s%5D%5B0%5D=false&fR%5Bhide%5D%5B0%5D=false&fR%5Blive%5D%5B0%5D=true&hFR%5Bsubjects_equipment.lv1%5D%5B0%5D=Bird%20Boxes&qtview=213073

5.0 Management

Responsibility

5.1 The householder will be responsible for all on-going management set out in this HMP.

Overarching management objective

5.2 The overall objective of the habitat and landscape scheme is:

- to create a framework of native planting upon which the garden can develop, naturalise and evolve over time; and,
- to deliver biodiversity enhancements consistent with the primary purpose of delivering a garden for the enjoyment of the residents of the new dwelling.

5.3 The scheme has been designed in response to the following design considerations:

- use of the existing hedgerow as a framework to strengthen the existing boundary
- improvement of retained habitats to increase their ecological value
- creation of new garden habitats with intrinsic biodiversity value.

5.4 This section sets out the year-on-year management for each.

Hedgerow planting

5.5 All newly planted hedgerow transplants will be subject to regular health checks especially during periods of dry weather, to ensure that they are not affected by drought. Any transplants showing signs of disease and dead and dying transplants will be removed and replacement trees planted in the first available planting window.

5.6 Stakes and ties will be inspected every six months and adjusted as required. Weed control around the base of newly planted hedgerow transplants will be undertaken on an as needed basis between April and September for at least the first two years of the management plan, after which the frequency of weed control will be reviewed and adjusted as necessary. When needed, vegetation around each spiral guard will be controlled to the extent necessary using an approved spot herbicide (such as Kerb or Roundup) to control weed growth. Die-back will be left to act as a mulch.

5.7 Applications of herbicides around the base of spiral guards will be undertaken with care to avoid accidental damage.

- 5.8 Guards and stakes will be removed once the trees are considered to be sufficiently established, usually between 3 and 5 years after first planting. All redundant material will be removed from the site.

Hedgerows

- 5.9 All established hedgerows will be cut outside of the bird-nesting season, between January and February to allow animals and birds access to fruits for the maximum amount of time. All hedgerow trimming will be completed by the end of February.
- 5.10 All newly planted lengths of hedgerow will be allowed to grow on for 3 years before first cut.

Species-rich grasslands

- 5.11 The flowering lawn seed mix has been specified to produce a low maintenance wildflower grassland that can be managed as a lawn from October to March (over winter) but cut less intensively during spring and summer, when successive flushes of wildflowers will bloom. Interest and structure to the grassland can be created through cutting curved paths, creating edge habitats and allowing sunlight and warmth into the margins, ideal for butterflies and other pollinators.

Boxes

- 5.12 All boxes will be reviewed once annually during the winter months of November to February to clean, repair and maintain in good order.

Post 5-years

- 5.13 Five years on from establishment, the garden will have established, matured and naturalised to develop its own character, form and structure. It is important to review the relevance of this Management Plan at this point to assess relevance and address any changes in management that may be appropriate, whilst always bearing in mind the overarching objectives of the design and purpose of the garden environment.

Monitoring

- 5.14 Regular and formal monitoring is not appropriate for this residential scheme and is not proposed. Reporting of progress against the outputs of this HMP will be provided on request by the Council.

Table 1: Management schedule

Prescription	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6 onwards
New hedgerow planting						
Inspection of health of newly planted transplants	Monthly inspection between July and October.	Monthly inspection between July and October.	Monthly inspection between July and October.	Monthly inspection between July and October.	Monthly inspection between July and October.	Annual inspection September each year
Replacement planting	Replacement planting to be undertaken October to March.	Replacement planting to be undertaken October to March.	Replacement planting to be undertaken October to March.	Replacement planting to be undertaken October to March.	Replacement planting to be undertaken October to March.	Allow any loss to act as natural thinning
Inspection of ties and stakes	Inspection and adjust as required over winter.	Inspection and adjust as required over winter.	Inspection and adjust or remove as required over winter.	Inspection and adjust or remove as required over winter.	Inspection and adjust or remove as required over winter.	No ties and stakes should remain. The requirement for inspection falls away.
Weed control between April and September	Bi-annual monitor for need and application of herbicide around base of spiral guard if required.	Bi-annual monitor for need and application of herbicide around base of spiral guard if required.	Weed control to be reviewed and schedule amended as required.	Amended schedule followed	Amended schedule followed	On-going weed control should not be necessary beyond the 5 th year after establishment.
Installation of bat box	Install x1 box as per specification on drawing 2312-004-LL01	Clean over winter months and check fixings	Clean over winter months and check fixings	Clean over winter months and check fixings	Clean over winter months and check fixings	Clean over winter months and check fixings

Established hedgerows						
Hedgerow cut and trim	Once, over winter.	Once, over winter	Once, over winter. Include newly planted hedgerow if appropriate.	Once, over winter. Include newly planted hedgerow.	Once, over winter. Include newly planted hedgerow.	Once, over winter. Include newly planted hedgerow.

Flowering lawns						
Cut following establishment	Once a week during the early growing season until 1 st week in April. Leave to flower over summer. Cut once a week from mid September until conditions too wet and/or no longer necessary over winter months.	Once a week during the early growing season until 1 st week in April. Leave to flower over summer. Cut once a week from mid September until conditions too wet and/or no longer necessary over winter months.	Once a week during the early growing season until 1 st week in April. Leave to flower over summer. Cut once a week from mid September until conditions too wet and/or no longer necessary over winter months.	Once a week during the early growing season until 1 st week in April. Leave to flower over summer. Cut once a week from mid September until conditions too wet and/or no longer necessary over winter months.	Once a week during the early growing season until 1 st week in April. Leave to flower over summer. Cut once a week from mid September until conditions too wet and/or no longer necessary over winter months.	Once a week during the early growing season until 1 st week in April. Leave to flower over summer. Cut once a week from mid September until conditions too wet and/or no longer necessary over winter months.

6.0 Summary

- 6.1 This report sets out a series of measures to deliver biodiversity enhancements as part of the scheme to demolish the barn and build a replacement dwelling on land adjacent to Laurel Cottage, Ivinghoe Aston.
- 6.2 The enhancements include:
- new hedgerow planting and gapping up to create new hedgerow habitat and improve the structure of existing hedgerow features.
 - the establishment of a species-rich flowering lawn mix to create new habitat and repair and enhance existing amenity grassland.
 - The erection of a bird box and a bat box in suitable locations within the garden.
 - commitment to an appropriate establishment and management scheme to ensure that new and enhanced habitats fully establish and are managed so that they reach their full potential.
- 6.3 Before works begin, a pre-commencement ecology survey will establish any ecological constraints to this HMP. Although unlikely, this HMP will be updated, and Condition 5 re-discharged if the results of this work require change to the prescriptions herein set out.

Appendix 1
Planting plan

Notes:
 This plan is intended for review / action in conjunction with the Landscape Specification for Implementation, Establishment & Maintenance (Ref: Z302-004-L-S01)

PROPOSED ECOLOGICAL MITIGATION: LOGGERS

- Beneficial for a wide range of invertebrates, hedgehogs, reptiles / amphibians
- Method & timing to accord with Ecologist guidance & Landscape Specification

PROPOSED NATIVE & WILDLIFE BENEFICIAL MITIGATION PLANTING

- Method & timing to accord with Ecologist guidance & Landscape Specification
- 310m² proposed tree planting with shrub & herbaceous understorey planting
- Native transplants & containerised stock planted at 1m centres
- Supplement with native snowdrops (planted as bulbs during early Autumn)

16 No. Anemone nemorosa 5%
 47 No. Asplenium scolopendrium 15%
 47 No. Dryopteris filix-mas 15%
 47 No. Geranium pyrenaeicum 'Bill Wallis' 15%
 16 No. Lonicera periclymenum 5%
 32 No. Luzula sylvatica 10%
 47 No. Polypodium vulgare 15%
 47 No. Primula veris 15%
 16 No. Viola odorata 5%

PROPOSED SPECIES RICH FLOWERING LAWN

AMENITY GRASSLAND ENHANCEMENT / REINSTATEMENT POST CONSTRUCTION

- Method & timing to accord with Ecologist guidance & Landscape Specification
- 150m² grassland sward enhancement for existing amenity lawn / garden
- Scarify existing sward to reduce amenity grass coverage and expose soil, the sow with Habitat Aid Flowering Lawn Mixture at 4g/m²
- https://www.habitataid.co.uk/products/flowering-lawn-seed-mix
- Supplement with spring flowering bulbs, planted during autumn

PROPOSED SPECIES RICH FLOWERING LAWN

REINSTATEMENT POST CONSTRUCTION

- Method & timing to accord with Ecologist guidance & Landscape Specification
- 28m² grassland reinstatement to replace previous stable floor area incursion
- Sow with Habitat Aid Flowering Lawn Mixture at 4g/m²
- https://www.habitataid.co.uk/products/flowering-lawn-seed-mix

PROPOSED ECOLOGICAL MITIGATION: BIRD NESTING

- Locate 1no bird nesting box to existing tree at an east / south-east facing orientation with open aspect that is minimum 2m above ground.
- [1no Vivara Pro Seville 28mm WoodStone Nest Box or similar]
<https://www.nhbs.com/vivara-pro-seville-28mm-woodstone-nest-box>

EXISTING HEDGEROW (SPARSE AREA)

REINSTATEMENT POST CONSTRUCTION

- Method & timing to accord with Ecologist guidance & Landscape Specification
- 12 linear metres hedge reinstatement to replace previous stable floor area incursion
- Native transplants at 0.5m centres pit planted in a double stagger row

5 No. Acer campestre 10%
 5 No. Corylus avellana 10%
 30 No. Crataegus monogyna 60%
 3 No. Ligustrum vulgare 5%
 3 No. Lonicera periclymenum 5%
 3 No. Rosa canina 5%
 3 No. Viburnum opulus 5%

PROPOSED DWELLING

- Floorplan 120m² replaces existing amenity lawn / garden
- Perimeter paving 37m² (entrance & elevation maintenance access)
- Access driveway 212m² replaces existing amenity lawn / garden

PRIVATE AMENITY GARDEN

- Outside space 517m² remains as existing garden
- Variety of wildlife beneficial shrubs & herbaceous perennials will enhance former lawn
- Scope for flexible layout & detail so that occupants can enjoy gardening

Plant Schedule					
Item	Number	Abbreviation	Species	Specification	Density
1	1	ACECAM	Acer campestre	1st	0.5% Double Staggered at 0.5m offset
2	1	ACECAM	Acer campestre	Standard Clear Stem 150x175 RB	Counted
3	1	CRAMO	Crataegus monogyna	1st	0.5% Double Staggered at 0.5m offset
4	1	CRAMO	Crataegus monogyna	Standard Clear Stem 150x175 RB	Counted
5	1	PRUNAV	Prunus avium	Standard Clear Stem 150x175 RB	Counted

Shrubs					
Item	Number	Abbreviation	Species	Specification	Density
1	1	CORAL	Cornus alba	Leader With Lateral	Counted
2	1	CORAV	Cornus avellana	1st	0.5% Double Staggered at 0.5m offset
3	1	CORAV	Cornus avellana	Leader With Lateral	Counted
4	1	CORAV	Cornus avellana	Standard	Counted
5	1	LEUVI	Ligustrum vulgare	1st	0.5% Double Staggered at 0.5m offset
6	1	LEUVI	Ligustrum vulgare	Leader With Lateral	Counted
7	1	ROSCA	Rosa canina	1st	0.5% Double Staggered at 0.5m offset
8	1	ROSCA	Rosa canina	Leader With Lateral	Counted
9	1	VIBBOD	Viburnum bodnantense 'Dawn'	Leader With Lateral	Counted
10	1	VIBBOD	Viburnum bodnantense 'Dawn'	Standard	Counted
11	1	VIBOP	Viburnum opulus	1st	0.5% Double Staggered at 0.5m offset
12	1	VIBOP	Viburnum opulus	Leader With Lateral	Counted

Herbaceous					
Item	Number	Abbreviation	Species	Specification	Density
1	1	ANEMO	Anemone nemorosa	Full pot	ICP
2	1	ASPLE	Asplenium scolopendrium	Full pot	ICP
3	1	DRYOP	Dryopteris filix-mas	Full pot	ICP
4	1	GERPY	Geranium pyrenaeicum 'Bill Wallis'	Full pot	ICP
5	1	VIODO	Viola odorata	Full pot	ICP

Climbers					
Item	Number	Abbreviation	Species	Specification	Density
1	1	LOPER	Lonicera periclymenum	Several Shoots, Canes	0.5% Double Staggered at 0.5m offset
2	1	LOPER	Lonicera periclymenum	Several Shoots	ICP

Conifers					
Item	Number	Abbreviation	Species	Specification	Density
1	1	TAXBAC	Taxus baccata	Counted	

Wildflowers					
Item	Number	Abbreviation	Species	Specification	Density
1	1	PRIVE	Primula veris	Full pot	ICP

Ferns					
Item	Number	Abbreviation	Species	Specification	Density
1	1	ASPSC	Asplenium scolopendrium	Full pot	ICP
2	1	DRYMAS	Dryopteris filix-mas	Full pot	ICP
3	1	POLVUL	Polypodium vulgare	Full pot	ICP

Grasses					
Item	Number	Abbreviation	Species	Specification	Density
1	1	LUZSY	Luzula sylvatica	Full pot	ICP

3 No. Euonymus europaeus

1 No. Cornus alba

3 No. Sambucus nigra

EXISTING NATIVE BOUNDARY HEDGEROW (INC TREES)

- Retain & protect to accord with Ecologist guidance & Landscape Specification
- Gap up (approx. 20% length) with supplementary native transplants for greater structural diversity and habitat quality
- Maintain in accordance with Landscape Specification

5 No. Acer campestre 10%
 5 No. Corylus avellana 10%
 28 No. Crataegus monogyna 60%
 3 No. Ligustrum vulgare 5%
 3 No. Lonicera periclymenum 5%
 3 No. Rosa canina 5%
 3 No. Viburnum opulus 5%

EXISTING HEDGEROW CLEARANCE TO FACILITATE DRIVEWAY ACCESS

- Method & timing to accord with Ecologist guidance & Landscape Specification
- Clearance of 6.5 to 7 metres length for surface construction
- Approx 1 metre reinstatement planting to each hedge end

1 No. Acer campestre 10%
 1 No. Corylus avellana 10%
 6 No. Crataegus monogyna 60%
 1 No. Ligustrum vulgare 5%
 1 No. Lonicera periclymenum 5%
 1 No. Rosa canina 5%
 1 No. Viburnum opulus 5%

1 No. Prunus avium

1 No. Acer campestre

1 No. Cornus alba

3 No. Fagus sylvatica

1 No. Prunus avium

3 No. Corylus avellana

1 No. Taxus baccata

1 No. Acer campestre

3 No. Corylus avellana

1 No. Viburnum bodnantense 'Dawn'

PROPOSED ECOLOGICAL MITIGATION: BAT ROOSTING

- Locate a bat box to existing tree (ref: Large multi-chamber Woodstone Box)
- https://nhbs.com/large-multi-chamber-woodstone-bat-box

Hardy Lodge
 Ivinghoe Aston
 LU7 9DF

LANDSCAPE PROPOSALS

1:200@ A1 JAN 2024 MG

Ref: 2312-004-LL01

REVISION 03 (02/02/24)
 Ecology habitat mitigation note update for nesting box provision