

12642: Land East of Spitfire Road, Calne

Technical Note: Ecology Response – November 2025

Signed,



Josh Greene

Ecologist, Ecology Solutions

4th November 2025

Reviewed by:



Daniel Wood BSc (Hons)

Director, Ecology Solutions

24th October 2025

Introduction

1. Ecology Solutions was commissioned by Robert Hitchins Ltd. in October 2025 to provide a technical note for the Land East of Spitfire Road (hereafter referred to as the 'Application Site').
2. Following the production of an Ecological Impact Assessment (EcIA) in June 2025 for the Application Site, a planning consultation response was received from the Wiltshire Council (WC) Ecologist (dated 23rd September 2025) with an objection requiring further information (see Appendix 1).
3. This technical note has been produced to address the comments raised by the WC Ecologist.

Response

Species Surveys

4. The WC Ecologist stated within their response that:

"The Site is assessed to offer moderate suitability for foraging and commuting bats in the form of hedgerows, scrub, grassland, scattered trees and an adjacent watercourse, Abberd Brook. Higher quality habitats are present in the surrounding area making it more likely species will use on-site habitats, connecting to the wider landscape. Four bat commuting and foraging corridors were identified. The eastern, southern, and western will be retained, while the northern corridor will be intersected by the proposed new access road, resulting in a partial loss of hedgerow. All identified key commuting and foraging routes must be retained, buffered and shown in the provided Ecological Parameters Plan, with replacement planting for lost sections of hedgerow to restore connectivity.

The habitat within the proposed development site and the surrounding area is suitable for roosting, foraging and commuting bats. An increase in artificial lux levels can deter bats which could result in roost abandonment and/or the severance of key foraging areas. This will likely result in a significant negative impact upon the health of bat populations across the region. Artificial light at night can have a substantial adverse effect on biodiversity. Any new lighting should be for the purposes for safe access and security and be in accordance with the appropriate Environmental Zone standards set out by the Institute of Lighting Engineers in their publication GN01:2021, 'Guidance for the Reduction of Obtrusive Light' (ILP, 2021), and Guidance note GN08/23 "Bats and artificial lighting at night", issued by the Bat Conservation Trust and Institution of Lighting Professionals. Suitable lighting to ensure dark foraging and commuting routes can be retained could be secured via condition.

Whilst the hedgerows are largely retained dark buffers are not specified (m) on the plans or reports therefore the application does not demonstrate that they will be adequately buffered from the development to ensure functionality will be maintained. To ensure ecological functionality for foraging and commuting bats is retained it is expected that an undeveloped continuous dark corridor is provided along key bat habitat."

5. Ecology Solutions acknowledge the request that all four bat foraging / commuting corridors be retained and buffered, however it is not considered possible to retain all corridors in their original condition, otherwise there would be no feasible way to bring an access road into the proposed development. Considering the Application Site is so narrow,

the loss of the northern foraging / commuting corridor is not deemed to significantly impact the local bat population, given the eastern, southern and western corridors are all retained and buffered, and therefore foraging / commuting bats are still able to navigate east-west through the Application Site. However, to mitigate the impacts to the northern corridor, tree planting is proposed (and is shown on the Illustrative Masterplan; see Appendix 2) either side of the new access road, to provide a crossing point for species of bats more tolerant to increased lux levels, such as *Pipistrellus spp.*

6. It is acknowledged that lighting should be designed in accordance with guidance, and can be secured through an appropriately worded condition. Similarly, the dark corridor is shown on the Ecological Parameters Plan at Appendix 3, with buffer distances shown.
7. The WC Ecologist did not raise any issues with any other protected species within the Application Site, stating that impacts to;
 - **Reptiles** can be mitigated through a Reasonable Avoidance Measures (RAMs) approach, detailed within a Construction Environmental Management Plan (CEMP), secured via condition;
 - **Badgers *Meles meles*** can be dealt with through a pre-commencement survey undertaken within 6 months of development commencing on-site. Should any new evidence of Badgers be noted, mitigation will be revised accordingly;
 - **Water Voles *Arvicola amphibius* / Otter *Lutra lutra*** can be mitigated through the measures outlined within the EclA being included within a CEMP which can be secured via condition.
 - **Nesting Birds** can be mitigated through removal of suitable vegetation being undertaken outside of the breeding bird season (March – August inclusive), and if this is not possible, a nesting bird check should be carried out within 48 hours of vegetation removal to avoid potential disturbance.

Core Policy 50

8. The WC Ecologist stated that:

"The location of the bat and bird boxes must be included in the site plan drawings and will become an enforceable part of the planning permission."
9. Ecology Solutions acknowledge this request. A Species Enhancement Plan (SEP) is provided at Appendix 4, illustrating locations of the bat and bird boxes.

Biodiversity Net Gain

10. Ecology Solutions have undertaken an updated Biodiversity Net Gain (BNG) assessment based on updates to the Illustrative Masterplan (see Plan BNG2 at Appendix 5). The updated BNG assessment returns the following headline results:

Table 1. Headline BNG results for the Application Site

		Defra BNG Metric Categories		
		Area	Linear (Hedgerows)	Linear (Water Course)
Development Site Baseline Results	Units	2.78	0.93	1.44
Development Site Post-Development Results	Units	3.78	1.03	1.59
	Unit Change	0.99	0.10	0.15
	% Change	+35.67	+10.29	+10.19

11. The revised assessment has led to an increase in the net gain for area based habitats units from 32.64% to 35.67%, with hedgerow and watercourse units remaining the same. It is considered that the target condition notes within the initial BNG assessment, outline within the EclA (dated June 2025) are still relevant and applicable to the new BNG assessment, as the types of habitats proposed to be created and enhanced are still the same. Therefore, it is considered that the WC Ecologist's request that BNG monitoring contributions be secured via a separate legal agreement is still relevant and accepted.
12. An updated BNG metric has also been submitted alongside this ecology response.

Ecological Parameters Plan

13. The WC Ecologist stated that:

"An Ecological Parameters Plan (EPP) is required to ensure compliance with Core Policy 50, the NPPF and Policy NE4: Trees, Woodland and Hedgerows from Calne Community Neighbourhood Plan 2 2023-38.

An Ecological Parameters Plan (EPP) is required. The EPP must clearly identify those areas of the site which are unconstrained, those areas where sensitive design or restrictions may be required, and any areas of the site which are to be retained, remain undeveloped, enhanced, form part of the landscaping for the purposes of protecting and enhancing biodiversity and any areas to be used as compensatory habitat in line with the submitted ecology documents, including the Biodiversity Net Gain Calculator spreadsheet. The EPP will become an 'approved document' of any outline permission granted and any reserved matters application must be in compliance with the plan

The EPP must include:

1. *A scaled drawing showing existing ecological features, distinguishing between those to be retained and those which will be lost e.g. hedgerows, trees, water features, badger setts etc.*

2. *Specify the minimum distance from each feature to the footprint of development e.g. to curtilage of properties, car parks, roads.*
 3. *Specify the buffer distance from light sensitive ecological features where the increase in lux levels will be zero or, if lux contours have been modelled, show contour lines for 1, 0.5 or 0.1 lux depending on the sensitivity of ecological features.*
 4. *Identify where new habitats will be created on site, include minimum area in hectares or length in metres and habitat type.*
 5. *Identify areas where habitat enhancement will be undertaken, include minimum area in hectares or length in metres and habitat type, e.g. defunct hedgerow to be grubbed up and replanted.*
 6. *Provide stand-off distances to the footprint of development e.g. curtilage to properties, car parks, roads for each tree to be retained, sufficient to ensure the tree will survive throughout the operational phase without risk of it being removed for health and safety, loss of amenity or liability reasons.*
 7. *Provide cross-sectional drawing to show profile of SuDs, ponds or wetland features to demonstrate there is adequate room for these features to have gently profiled sides and thereby maximise their biodiversity potential."*
14. Ecology Solutions acknowledges this request, and an EPP has been produced for the Application Site (see Appendix 3). It should be noted that item 7 on the list of what the EPP must include is not present in the submitted EPP for the Application Site. This information has been provided within the updated Flood Risk and Drainage Strategy produced by Phoenix Design, which has been submitted to the Council.

Summary & Conclusions

15. The WC Ecologist's request regarding the retention of all foraging / commuting corridors for bats within the Application Site is not considered feasible. However, mitigation is proposed for the impacted northern hedgerow in the place of tree planting either side of the new access road. Additionally, it is considered that, given how narrow the Application Site is, local bat populations will not be significantly impacted by the functional loss of the northern hedgerow, as they are still able to navigate east-west through the Application Site.
16. All other protected species are considered to not present ecological constraints on the proposed development, with mitigations recommended to be secured via condition.
17. The WC Ecologist's request for a plan showing locations of bat and bird boxes, to satisfy Core Policy 50 has been acknowledged and a Species Enhancement Plan produced to provide this information (see Appendix 4).
18. An updated BNG assessment has been included within the ecology response, based on amendment to the Illustrative Masterplan. It is still considered that the proposed development achieves a 10% gain across all elements of the BNG metric, with a slight increase in habitat areas achieved over the initial assessment.

19. The WC Ecologist's request for the production of an EPP has been acknowledged and a plan provided (see Appendix 3), excluding the information on item 7 which is provided separately within the updated FRA and DAS submissions.
20. Overall, it is therefore considered that the WC Ecologist's concerns regarding ecology have been addressed, and it can be concluded that there are no substantive grounds for objecting to the proposals based on ecology and nature conservation considerations.

Appendices

APPENDIX1

Wiltshire Council Planning Consultation
Response 23/09/2025

Wiltshire Council Planning Consultation Response

ECOLOGY

Officer name:	Jessica Cracknell (Ecologist)
Date:	23/09/2025
Application number:	PL/2025/05943
Proposal:	Residential development for up to 20 dwellings, associated works including infrastructure, ancillary facilities and landscaping. Construction of a new vehicular access off Spitfire Road.
Site address:	Land East of Spitfire Road, Calne
Case officer:	Jonathan James

Recommendations:

☐	No Comment
☐	Support
☐	No objection
☐	Condition (no objection subject to conditions)
☒	Objection - further information required
☐	Objection in principle
☐	HRA completed

Further Information Required:

	Issue	Policy/Legislative Compliance	Date information requested & Further information required	Satisfactorily addressed (Document & Date)
1	Enhancements and Mitigation	NPPF, CP50	23/09/2025 Enhancement measures suggested in ecological impact assessment to be shown on site drawings/plans.	NO
2	Ecological Parameters Plan (EPP)	NPPF, CP50	23/09/2025 An EPP To be submitted in support of the Outline application and adhered to at REM.	NO

The outstanding document(s) listed above are needed to enable the council's ecology team to consider all the relevant impacts and benefits of the proposed scheme. The council's ecologists will provide a further response once all the above information has been submitted via the case officer.

Please Note: When resubmitting a revised document, ALL changes must be highlighted to enable review.

Thank you for consulting Ecology, I have reviewed the application and supporting documents against OS Maps and aerial photography of the site and surrounding area, together with GIS layers of statutory and non-statutory sites and existing records of protected species.

The following submitted documentation was reviewed to inform this response:

- Ecological Impact Assessment & Biodiversity Net Gain. 22 May 2025. Ecology Solutions;
- The Statutory Biodiversity Metric. 23 May 2025. Ecology Solutions;
- Arboricultural Survey, Impact Assessment and Protection Plan. 27 June 2025. MBP Arboriculture. Version. V4;

- Illustrative Masterplan. 19 June 2025. Robert Hitchins. Drawing No. 381.UD.01;
- Design & Access Statement. July 2025. Robert Hitchins. Rev. B;
- Planning Statement. 01 July 2025. Pegasus Group. Ref. P23-2672.

The mitigation and enhancements outlined in the submitted Ecological Assessment must be clearly incorporated into an Ecological Parameters Plan (EPP), and subsequent plans at Reserved Matters stage. Key measures include but are not limited to:

- Creation of species-rich grassland using native seed mixes
- New and enhanced scrub and hedgerow planting using native species to ensure long-term ecological functionality.
- Retention and protection of all hedgerows and trees during construction, with protective fencing at canopy width.
- Setback of the proposed outfall to reduce stream bank impacts, with immediate planting of aquatic and marginal vegetation around the headwall and wet ditch to stabilise banks and provide new aquatic habitat.

The retention of existing hedgerows and trees is welcomed; however, the proposed layout severs the northern commuting corridor. Replacement planting, such as large specimen trees as recommended in the Ecological Assessment, must be shown on the submitted plans to ensure ecological connectivity is maintained. **To align with the Wiltshire Green Blue Infrastructure (GBI) Strategy we request the northern boundary of the site is reviewed to ensure the significant corridor is continued throughout the development.**

Reptiles

Reptile surveys undertaken within the adjacent site between April and May 2022, confirmed the presence of Slow Worm and Grass Snake. Given the similarity of habitats, it is considered likely that reptiles are also utilising the application site. Reasonable avoidance measures should be included within a Construction Environment Management Plan (CEMP) which can be secured by condition.

Badgers

Any identified badger setts must be retained within the development proposals wherever possible, with a minimum 30m buffer from built form or construction activities. Where retention is not feasible, any active setts impacted by the scheme must be closed under a Natural England licence, following best practice protocols. Given the potential for new badger setts to be established, an updated badger survey should be undertaken no more than six months prior to the commencement of development. Should the status of badgers on the site have changed, the mitigation measures will need to be revised accordingly.

Water Voles/Otters

Surveys undertaken along Abberd Brook in March 2025 recorded no direct evidence of Otter or Water Vole within the section adjacent to the Application Site. However, records confirm both species are present within the wider area. The watercourse itself was assessed as offering suitable habitat for dispersal and foraging. The proposed development includes installation of a headwall to discharge surface water into the brook, which could result in indirect impacts through siltation, runoff or localised bank loss. Mitigation measures set out in the ecological impact assessment are supported and should be included within a Construction Environment Management Plan (CEMP) which can be secured by condition.

Bat Species

The Site is assessed to offer moderate suitability for foraging and commuting bats in the form of hedgerows, scrub, grassland, scattered trees and an adjacent watercourse, Abberd Brook. Higher quality habitats are present in the surrounding area making it more likely species will use on-site habitats, connecting to the wider landscape. Four bat commuting and foraging corridors were

identified. The eastern, southern, and western will be retained, while the northern corridor will be intersected by the proposed new access road, resulting in a partial loss of hedgerow. All identified key commuting and foraging routes must be retained, buffered and shown in the provided Ecological Parameters Plan, with replacement planting for lost sections of hedgerow to restore connectivity.

The habitat within the proposed development site and the surrounding area is suitable for roosting, foraging and commuting bats. An increase in artificial lux levels can deter bats which could result in roost abandonment and/or the severance of key foraging areas. This will likely result in a significant negative impact upon the health of bat populations across the region. Artificial light at night can have a substantial adverse effect on biodiversity. Any new lighting should be for the purposes for safe access and security and be in accordance with the appropriate Environmental Zone standards set out by the Institute of Lighting Engineers in their publication GN01:2021, 'Guidance for the Reduction of Obtrusive Light' (ILP, 2021), and Guidance note GN08/23 "Bats and artificial lighting at night", issued by the Bat Conservation Trust and Institution of Lighting Professionals. Suitable lighting to ensure dark foraging and commuting routes can be retained could be secured via condition.

Whilst the hedgerows are largely retained dark buffers are not specified (m) on the plans or reports therefore the application does not demonstrate that they will be adequately buffered from the development to ensure functionality will be maintained. To ensure ecological functionality for foraging and commuting bats is retained it is expected that an undeveloped continuous dark corridor is provided along key bat habitat.

Nesting Birds

The scrub and hedgerows across the site provide suitable nesting habitat for a range of bird species. Where possible, habitat removal must be scheduled outside the bird breeding season (1st March–31st August) to avoid potential disturbance. If removal during this period is unavoidable, a pre-works nesting bird inspection will be conducted no more than 48 hours before clearance.

Compliance with Core Policy 50

Core Policy 50 of the Wiltshire Core Strategy requires all development to demonstrate no net loss of biodiversity and to seek opportunities to enhance biodiversity. The NPPF also encourages applications to deliver measurable net gains (para 186 d).

Ecological enhancements within Section 10.3 of the Ecological Impact Assessment and Biodiversity Net Gain report are provided through the installation of log piles, five bat and bird boxes. **The location of the bat and bird boxes must be included in the site plan drawings and will become an enforceable part of the planning permission.**

Biodiversity Net Gain

Under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021) this application is required to deliver 10% Biodiversity Net Gain (BNG). The Biodiversity Gain Plan condition will automatically apply if approval is forthcoming.

A completed statutory metric calculation (23 May 2025. Ecology Solutions) confirming the baseline and predicted post- development biodiversity units of the site has been submitted (including the condition assessment sheets and maps).

Information in the completed on-site baseline habitat tabs is accepted as accurate based on the information submitted. The pre-development (baseline) situation is summarised below.

On-site pre-development	2.70 Habitat units
(baseline) biodiversity value	0.93 Hedgerow units

	1.44 Watercourse units
Are there any irreplaceable habitats on-site?	No
Has any habitat degradation of occurred?	No

In order for the council to fulfil its BNG monitoring responsibilities. A BNG monitoring contribution will be required and secured via a separate legal agreement.

Ecological Parameters Plan (EPP)

An Ecological Parameters Plan (EPP) is required to ensure compliance with Core Policy 50, the NPPF and Policy NE4:Trees, Woodland and Hedgerows from Calne Community Neighbourhood Plan 2 2023-38.

An Ecological Parameters Plan (EPP) is required. The EPP must clearly identify those areas of the site which are unconstrained, those areas where sensitive design or restrictions may be required, and any areas of the site which are to be retained, remain undeveloped, enhanced, form part of the landscaping for the purposes of protecting and enhancing biodiversity and any areas to be used as compensatory habitat in line with the submitted ecology documents, including the Biodiversity Net Gain Calculator spreadsheet. The EPP will become an 'approved document' of any outline permission granted and any reserved matters application must be in compliance with the plan.

The EPP must include:

1. A scaled drawing showing existing ecological features, distinguishing between those to be retained and those which will be lost e.g. hedgerows, trees, water features, badger setts etc
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3. Specify the buffer distance from light sensitive ecological features where the increase in lux levels will be zero or, if lux contours have been modelled, show contour lines for 1, 0.5 or 0.1 lux depending on the sensitivity of ecological features
4. Identify where new habitats will be created on site, include minimum area in hectares or length in metres and habitat type
5. Identify areas where habitat enhancement will be undertaken, include minimum area in hectares or length in metres and habitat type, e.g. defunct hedgerow to be grubbed up and replanted
6. Provide stand-off distances to the footprint of development e.g. curtilage to properties, car parks, roads for each tree to be retained, sufficient to ensure the tree will survive throughout the operational phase without risk of it being removed for health and safety, loss of amenity or liability reasons.
7. Provide cross-sectional drawing to show profile of SuDs, ponds or wetland features to demonstrate there is adequate room for these features to have gently profiled sides and thereby maximise their biodiversity potential.

CONDITIONS: these will be added once the issues above have been addressed

Final sign off – all matters addressed:

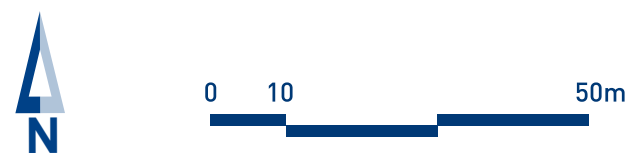
Ecologist	Date
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APPENDIX2

Illustrative Masterplan



- KEY**
- SITE ACCESS
 - DWELLINGS
 - EXISTING VEGETATION
 - PROPOSED STREET TREE
 - PROPOSED AMENITY TREE
 - PRIVATE DRIVEWAY
 - INDICATIVE SUDS
 - INFORMAL FOOTPATH
 - INTERNAL ROAD
 - INFORMAL PLAY/TRIM TRAIL
 - PUBLIC OPEN SPACE



Site Name: LAND EAST OF SPITFIRE ROAD		Drawing Number: 381.UD.01		Revision: M	 Robert Hitchins The Complete Development Solution The Manor, Boddington, Cheltenham, Gloucestershire, GL51 0TJ Tel: 01242 680694 www.robert-hitchins.co.uk	
Drawing Title: ILLUSTRATIVE MASTERPLAN		Drawn By: LD	Checked By: GRJ	Date: 16/10/25		Scale: 1:1000 @ A3

APPENDIX3

Ecological Parameters Plan



KEY:

- APPLICATION SITE BOUNDARY
- ILLUSTRATIVE DARK CORRIDOR - 0.414ha
- LOST MODIFIED GRASSLAND - 0.514ha
- RETAINED MODIFIED GRASSLAND - 0.042ha
- CREATED MODIFIED GRASSLAND - 0.316ha
- ENHANCED OTHER NEUTRAL GRASSLAND - 0.147ha
- CREATED OTHER NEUTRAL GRASSLAND - 0.029ha
- LOST SCRUB - 0.044ha
- ENHANCED SCRUB - 0.095ha
- CREATED SCRUB - 0.032ha
- CREATED SUSTAINABLE DRAINAGE SYSTEM - 0.026ha
- CREATED TREES - 0.171ha
- CREATED WET DITCH - 0.041km
- LOST HEDGEROW - 0.014km
- RETAINED HEDGEROWS - 0.081km
- CREATED HEDGEROWS - 0.050km
- ILLUSTRATIVE BUFFER DISTANCES



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12642: LAND EAST OF SPITFIRE
ROAD, CALNE

ECOLOGICAL PARAMETERS
PLAN

Rev: C
Nov 2025

0 25 50 m

APPENDIX4

Species Enhancement Plan



KEY:

- APPLICATION SITE BOUNDARY
- ILLUSTRATIVE BAT BOX LOCATION
- ILLUSTRATIVE BIRD BOX LOCATION

Bat boxes should be installed in a south-east to south-west orientation, at a height of between 3-6m above ground level.

Bird boxes should be installed in a north to east orientation, at a height of at least 2m above ground level



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12642: LAND EAST OF SPITFIRE
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SPECIES ENHANCEMENT PLAN

Rev: B
Nov 2025

APPENDIX5

Biodiversity Net Gain – Post-Development



- KEY:**
- APPLICATION SITE BOUNDARY
 - OTHER NEUTRAL GRASSLAND (g3c)
 - 0.030ha Moderate - Created
 - 0.147 Moderate - Enhanced
 - MODIFIED GRASSLAND (g4)
 - 0.042 Poor - Retained
 - 0.316 Poor - Created
 - MIXED SCRUB (h3h)
 - 0.032ha Moderate - Created
 - 0.095ha Moderate - Enhanced
 - DEVELOPED LAND; SEALED SURFACE (u1b)
 - 0.494ha Retained
 - 0.247ha Created
 - BUILDINGS (u1b5)
 - 0.101 Created
 - VEGETATED GARDEN (u~828)
 - 0.175ha Created
 - SUSTAINABLE DRAINAGE SYSTEM (u~848)
 - 0.026ha Good - Created
 - 70% DEVELOPED LAND; SEALED SURFACE (u1b) / 30% VEGETATED GARDEN (u~828)
 - 0.068 u1b Retained
 - 0.029ha u~828 Retained
 - URBAN TREE (w~200)
 - 0.171ha Moderate - Created
 - NATIVE HEDGEROW (h2a)
 - 0.121km Good - Retained
 - 0.05km Moderate - Created
 - WET DITCH (r~50)
 - 0.041km Moderate - Created

ECOLOGY SOLUTIONS
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12642: LAND EAST OF SPITFIRE ROAD, CALNE

PLAN BNG2:
POST-DEVELOPMENT HABITATS

Rev: D
Nov 2025



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