



ECOLOGICAL IMPACT ASSESSMENT

WELBORNE GARDEN VILLAGE
PHASE 3B
LAND NEAR FUNTLEY
FAREHAM
HAMPSHIRE

MAY 2026
UPDATED JULY 2026

ON BEHALF OF CG FRY AND SON LTD



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1.0 EXECUTIVE SUMMARY

- 1.1. This Ecological Impact Assessment has been prepared by LC Ecological Services Limited, in accordance with Condition 28 of outline planning consent P/17/0266/OA at Welborne, Fareham, Hampshire (Central grid ref: SU 57328 09614) to support the application for reserved matters approval for the residential development known as Phase 3b for 75 residential units on land south-east of Dashwood, including associated parking and landscaping.
- 1.2. The scoping information provided by the ecological appraisal summarises the ecological baseline methods and results, evaluates the Important Ecological Features and indicates the potential impacts, and proposes mitigation for the construction and operational phases of the proposed development.
- 1.3. Eighteen IEFs were identified during this EcIA assessment, including three designated sites of international importance: Solent and Southampton Waters Special Protected Area (SPA), Solent Maritime Special Area of Conservation (SAC), and Portsmouth Harbour Ramsar; two nationally designated sites: Portsmouth Harbour Site of Special Scientific Interest (SSSI) and Botley Wood and Everett's and Mushes Copses SSSI; six regionally designated sites of Blakes Copse Site of Important Nature Conservation (SINC), Carpenters Copse SNIC, Martin's Copse SNIC, Birchfrith Copse SNIC, Knowle Copse/Dash Wood/Ravens Wood SNIC and Homerhill Copse and The Hanger SNIC; two habitats including modified grassland, species poor native hedgerows and five fauna including badgers, foraging and commuting bats, hazel dormouse, nesting birds and reptiles. No significant negative impacts are predicted to the Important Ecological Features that were identified during the assessment following the proposed mitigation measures.
- 1.4. The zone of influence of the project was determined by the sensitivity of the ecological features to environmental change within the site and the surrounding area in accordance with the guidelines for Ecological Impact Assessment (CIEEM, 2018).

2.0 INTRODUCTION

- 2.1. This Ecological Impact Assessment has been prepared by LC Ecological Services Limited, in accordance with Condition 28 of outline planning consent P/17/0266/OA at Welborne, Fareham, Hampshire (Central grid ref: SU 57328 09614) to support the application for reserved matters approval for the residential development known as Phase 3b for 75 residential units on land south-east of Dashwood, including associated parking and landscaping. The site location and survey boundaries are depicted in the plan included in appendix I. The site proposal plan is included in appendix II.
- 2.2. The report summarises the ecological baseline methods and results; evaluates the Important Ecological Features (IEFs); and indicates the potential impacts and proposes mitigation for the construction and operational stages of the proposed development.
- 2.3. The purpose of this report is to outline the following:
- To identify and describe all potentially significant ecological effects associated with the proposed extraction.
 - To set out the mitigation measures required to ensure compliance with nature conservation legislation and to address any potentially significant ecological effects.
 - To identify how mitigation measures will/could be secured.
 - To provide an assessment of the significance of any residual effects.
 - To identify appropriate enhancement measures.
 - To set out the requirements for post-construction monitoring.

3.0 LEGISLATION AND POLICY

Legislation

3.1. Full details of statutory obligations with respect to biodiversity and the planning system can be found in DEFRA Circular 06/2005. Relevant legislation to this application site includes the following:

- **Internationally Designated Sites:** Special Protection Areas (SPA) and Sites of Nature Conservation (SAC) are part of the National Sites Network protected under the *Conservation of Habitats and Species Regulations 2017* (as amended, 2019). Ramsar sites are protected under the *Ramsar Convention (1971)*.
- **Nationally Designated Sites:** Sites of Special Scientific Interest (SSSI) are protected under section 28 of the *Wildlife and Countryside Act (WCA) 1981 (as amended)*.
- **Badgers (*Meles meles*):** Protection of Badgers Act 1992.
- **Bats:** all species of British bats and their roosts are fully protected under the *Wildlife and Countryside Act (WCA) 1981 (as amended)* and the *Conservation of Habitats and Species (Amendment) Regulations 2017*.
- **Birds:** all birds, their nests, eggs, and young are protected by the *WCA 1981 (as amended)*.
- **Great crested newt (*Triturus cristatus*):** great crested newts and their shelter are protected by *WCA 1981* and the *Conservation of Habitats and Species (Amendment) Regulations 2017*.
- **Mammals:** Wild Mammals (Protection) Act 1996.
- **Otter (*Lutra lutra*):** otters are fully protected by the *Conservation of Habitats and Species (Amendment) Regulations 2017*.
- **Reptiles:** the adder (*Viper berus*), common lizard (*Zootoca vivipara*), grass snake (*Natrix helvetica*) and slow worm (*Anguis fragilis*) receive protection under the *WCA 1981 (as amended)*.
- **Water vole (*Arvicola amphibus*):** water voles and their burrows are protected by *WCA 1981*.

National planning policy

3.2. Chapter 15 of the National Planning Policy Framework (NPPF, 2024) '*Conserving and enhancing the natural environment*' sets out the Government's planning policies relating to biodiversity, landscape and geological conservation. The relevant paragraphs within this chapter include:

- **Paragraph 187:** Recognise the wider benefits of ecosystem services and minimise impacts on biodiversity, providing net gains in biodiversity.

- **Paragraph 188:** Planning positively and distinguishing between the hierarchy of designated sites and allocating land with the least environmental value and maintaining, enhancing networks of habitats and green infrastructure.
- **Paragraph 192:** Protect and enhance biodiversity and geodiversity by safeguarding wildlife-rich habitats and wider ecological networks; promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and securing biodiversity net gain.
- **Paragraph 193:** Refuse development if found to have significant harm to biodiversity; is on land within or outside a Site of Special Scientific Interest (SSSI) which is likely to have an adverse effect; if results in the loss of deterioration of irreplaceable habitats. Developments with the primary objective to conserve or enhance biodiversity will be supported, while opportunities to improve biodiversity in and around developments should be integrated as part of their design and can secure measurable net gains for biodiversity or enhance public access to nature.
- **Paragraph 194:** Protection to be given to potential SPA and possible SACs, proposed Ramsar sites, and sites identified or required as compensatory measures for impacts to these sites.
- **Paragraph 195:** Considers if the development is to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

Local planning policy

3.3. Relevant planning policies within the Fareham Local Plan, Shaping Fareham's Future Local Plan Part 3: The Welborne Plan (Adopted April 2014) include:

- Policy WEL31: Conserving and Enhancing Biodiversity
- Policy WEL32: Strategic Green Corridors and Connections

Biodiversity Action Plans

3.4. Relevant Biodiversity Action plans (BAPs) are as follows:

- Reptiles (all species) (UKBAP)
- Noctule (*Nyctalus noctula*) (UKBAP)
- Soprano pipistrelle (*Pipistrellus pygmaeus*) (UKBAP)
- Brown long-eared bat (*Plecotus auritus*) (UKBAP)
- Hazel dormouse (UKBAP)
- Great crested newt (UKBAP)

- Bullfinch (*Pyrrhula pyrrhula*) (UKBAP)
- Dunnock (*Prunella modularis*) (UKBAP)
- Song thrush (*Turdus philomelos*) (UKBAP)

4.0 ASSESSMENT METHODOLOGY

Study area

- 4.1. The site is located at the approximate central Ordnance Survey (OS) grid reference SU 5732809614 and the study area comprises the site plus:
- 5 kilometres for any international statutory designated sites for nature conservation.
 - 2 kilometres for any national statutory designated sites for nature conservation.
 - 1 kilometre for any non-statutory designated sites for nature conservation.
 - 2 kilometres for all records of protected, notable and invasive species.
 - 500 metres for great crested newts.
 - 30 metres for badgers.

Sources of information

- 4.2. The following sources of information were used to inform the impact assessment:

Table 1: Summary of survey work and sources of information for Phase 3b

Survey type	Year(s)	Comment
Desk study – information on statutory sites and granted protected species mitigation licences.	2026	Records obtained from Natural England’s web-based Multi-Agency Geographic Information for the Countryside (MAGIC)
Data search - protected species within 2 kilometres of the site, and non-statutory designated sites within one kilometre of the site.	2026	Information obtained from Dorset Environmental Records Centre (HBIC)
Habitat survey and habitat suitability assessment for protected species, including badger, bats, hazel dormouse, great crested newts, nesting birds and reptiles.	2026	LC Ecological Services March 2026
Bats – activity surveys	2016, 2019, 2020, 2022	LC Ecological Services April to September 2022
Hazel dormouse surveys	2016, 2019, 2022	LC Ecological Services which May to September 2022

Survey type	Year(s)	Comment
Reptile surveys	2013, 2016, 2019, 2022	LC Ecological Services, historic surveys, current surveys between April and June 2022
Badger surveys	2016, 2019, 2022	LC Ecological Services in April 2022

Assessment process

- 4.3. The EclA is in accordance with the CIEEM *Guidelines for Ecological Impact Assessment in the UK and Ireland* (CIEEM, 2018).
- 4.4. The starting point was to determine which features should be subject to detailed assessment, that is, those IEFs:
- a) Of sufficient value that impacts upon them may be significant (in terms of legislation or policy); and
 - b) Potentially vulnerable to significant impacts arising from the mineral extraction.
- 4.5. This approach is consistent with the EIA Regulations, which only require investigation of likely significant effects.
- 4.6. The CIEEM guidelines recommend that the value of IEFs or features is determined based on a geographic frame of reference that includes the following levels:

Table 2: Level of value assigned to each IEF (adapted from CIEEM, 2018).

Level of Value	Example of Definitions
International	An internationally important site e.g., SPA, SAC, Ramsar (or a site considered worthy of such a designation). A viable area of a habitat type listed in Annex 1 of the Habitats Directive, or smaller areas of such habitats which are essential to maintain the viability of a larger whole. A regularly occurring population of an internationally important species (listed on Annex IV of the Habitats Directive).
UK / National	A nationally designated site e.g., SSSI or a site considered worthy of such designation. A viable area of a priority habitat identified within the UK BAP, or of smaller areas of such habitat which are essential to maintain the larger whole.

Level of Value	Example of Definitions
	Any recurring population of a nationally important species e.g., listed on Schedules 5 and 8 of the Wildlife and Countryside Act 1981 (as amended). A feature identified as of critical importance in the UK BAP.
Regional (Hampshire)	A site designated as a Site of Nature Conservation Interest (SINC) or habitats that meet the designation criteria for SINC's in Hampshire Areas of internationally or nationally important habitats which are degraded but are considered readily restored. A regularly occurring, locally significant population of a species listed as being nationally scarce. A regularly occurring, locally significant number of a regionally important species.
Local (the zone of influence including the site and its immediate vicinity, including habitats within, or linked to those on site)	Areas of internationally or nationally important habitats which are degraded and have little or no potential for restoration. A good example of a common or widespread habitat in the region.

Assessment criteria

Predicting and characterising ecological impacts

- 4.7. The assessment of magnitude of effect assesses whether an impact will be positive or negative; its extent; duration; reversibility and timing and frequency as well as the cumulative effect. A combination of quantitative information and qualitative assessment based on professional judgment was used whilst considering all these factors to assign effects on the IEFs to one of four categories as detailed in table 3 below.

Table 3: Assessment of magnitude of effects.

Category	Definition
High	A permanent or long-term effect on the extent/size or integrity of a site, habitat, species assemblage or community, population, or group. If adverse this is likely to threaten its sustainability. If beneficial this is likely to enhance its conservation status.
Medium	A permanent or long-term effect on extent/size or integrity of a site, habitat, species assemblage or community, population, or group. If adverse this is unlikely to threaten its sustainability. If beneficial this is likely to be sustainable but is unlikely to enhance its conservation status.

Category	Definition
Low	A short-term but reversible effect on the extent/size or integrity of a site, habitat or species assemblage or community, population or group that is within the range of variation normally experienced between years.
Negligible	A short-term but reversible effect on the extent/size or integrity of a site, habitat or species assemblage or community, population or group that is within the normal range or annual variation.

- 4.8. For each IEF, the significance of the effects of the proposed extraction during construction and operation are assessed and the type of impacts are characterised according to their importance and magnitude. Where there is uncertainty over the appropriate level of significance to assign, this will be stated but as a precautionary measure the higher level of significance will be applied. Where impacts will arise, mitigation and enhancement measures are provided.

Direct and indirect ecological impacts

- 4.9. Both direct and indirect impacts are considered within this assessment. A direct impact is a defined action such as the physical loss of a habitat or the immediate mortality of an individual of a particular species. Indirect impacts are attributable to an action, but which affect ecological resources through effects on an intermediary ecosystem, process or IEF e.g., the loss of an important prey species for a predator.

Limitations

- 4.10. The habitat survey was undertaken in March which is just outside the optimal survey season for botanical surveys, taken to be from April to August. Therefore, some flowering plants may have been missed. This is not considered to be a significant limitation as sufficient information was gathered during the survey to determine habitats present on site.
- 4.11 The lack of records returned from the data search cannot be used to rule out species on site it is likely from under recording in the area.

5.0 BASELINE

- 5.1. The site was subject to desk-based and habitat surveys in 2026. An ecological appraisal and UK habitat classification survey was conducted by experienced ecologist Nikkii Hesketh-Roberts on 13th March 2026. Previous survey data from the site and wider Welborne sites were used to inform this assessment. The methods and the key findings are summarised in this section to inform the nature conservation evaluation for each of the IEFs identified.

Statutory sites and non-statutory sites

- 5.2. There are three internationally designated sites within a five-kilometre radius surrounding the site. These include Portsmouth Harbour Ramsar lying 3.53 kilometres south of the site, Solent Water Special Protection Area (SPA) lying 5.0 kilometres west of the site, Solent Maritime Special Area of Conservation (SAC) lying 5.0 kilometres to the west and. Full details of these sites are provided in appendix III, Table A1.
- 5.3. There are two nationally designated sites within a two kilometres radius surrounding the site. These include Botley Wood and Everett's and Mushes Copses Site of Special Scientific Interest (SSSI) lying 2.0 kilometres west of the site and Portsmouth Harbour SSSI lying 3.53 kilometres south of the site. Further details are provided in appendix III, Table A1.
- 5.4. Non-statutory designated sites include six Sites of Importance for Nature Conservation (SINCs) which are located within one kilometre of the site. The nearest is Blakes Copse SINC which lies 320 metres north of the site. Other sites include Carpenters Copse SINC which lies 0.57 kilometres north-east, Martin's Copse SINC which lies 0.78 kilometres north, Birchfrith Copse SINC which lies 0.91 kilometres north-west and Knowle Copse / Dash Wood / Ravens Wood SINC which lies 0.92 kilometres northwest of the application site. Further details are provided in appendix III, Table A1.

Habitats present within the red line boundary of the site

- 5.5. The habitat types within the site were noted during the survey undertaken on the 13th March 2026 by experienced ecologist Nikkii Hesketh-Roberts. Dominant plant species were recorded for each habitat present. Habitats were classified using the UK Habitat Classification methodology version 2.0 (UKHab, 2023). The survey included directly searching for legally protected and invasive species of plant and categorising any habitats of ecological value that were encountered. A general description of the vegetation was also noted, listing species encountered and scoring their abundance using the DAFOR scale shown below.

D Dominant
A Abundant

F	Frequent
O	Occasional
R	Rare
L	Local (used as a prefix to any of the above)

5.6. The habitats present on site comprised areas of modified grassland in the southwest of the site bounded by species poor native hedgerow on the northwestern boundary of the site, with areas of paving, gravel and concrete forming a compound consisting of areas for parking and housing of shipping containers, sparsely vegetated land in the east of the site and artificially unvegetated unsealed surface was present in the north of the site adjacent to the hardstanding.

5.7. The following habitats were recorded on site and are described below. A baseline habitat map is provided as appendix V and site photographs are provided as appendix XI.

- Developed and sealed surface - buildings (u1b, 805)
- Artificially unvegetated unsealed surface (u1c, 81, 510, 839, 805)
- Modified grassland (g4, 10, 16, 81, 82, 805)
- Species poor native hedgerow (h2a6, 116, 522, 805)
- Sparsely vegetated urban land (u1f, 81, 510, 805, 839)

Developed, sealed surface (Target notes 2 and 3, appendix IV and XII)

5.8. There is paving, gravel and concrete which form the compound in the north of the site, comprising areas for parking and housing of shipping containers providing the site offices. This habitat holds negligible ecological value and, as such, **this habitat has been excluded from further assessment.**

Artificially unvegetated unsealed surface (Target note 1, appendix IV and XII)

5.9. Areas of compacted aggregate and exposed soils, currently used for temporary storage of materials and tracks used for vehicle movement were present in the north of the site, adjacent to the hardstanding. The surface was mainly unvegetated due to regular disturbance, however there were small patches of ruderal vegetation present along the margins. Several piles of aggregate were also present close to the compounds, along with a longer, narrower pile along the eastern boundary that was heavily colonised by ephemeral and ruderal species. Species present included abundant bristly oxtongue (*Helminthotheca echioides*), frequent annual meadow-grass (*Poa annua*), broad-leaved dock (*Rumex obtusifolius*), yarrow (*Achillea millefolium*), cat's-ear (*Hypochaeris radicata*), creeping bent (*Agrostis stolonifera*), black grass (*Alopecurus myosuroides*), spear thistle (*Cirsium vulgare*) and shepherd's purse (*Capsella bursa-pastoris*), locally frequent Yorkshire-fog (*Holcus lanatus*), spotted medick (*Medicago arabica*) and vetch sp. (*Vicia sp.*), occasional and locally frequent mayweed species (*Matricaria*

sp.) and occasional cock's-foot (*Dactylis glomerata*), dove's-foot crane's bill (*Geranium mole*), smooth sow-thistle (*Sonchus oleraceus*), common field speedwell (*Veronica persica*), charlock (*Sinapis arvensis*), black medick (*Medicago lupulina*), greater plantain (*Plantago major*), willowherb sp. (*Epilobium* sp.), groundsel (*Senecio vulgaris*), red dead-nettle (*Lamium purpureum*), common mouse-ear (*Cerastium fontanum*), Canadian fleabane (*Erigeron canadensis*), nipplewort (*Lapsana communis*), swinecress (*Lepidium didymium*), ribwort plantain (*Plantago lanceolata*) and hawksbeard species (*Crepis* sp.). Artificial unsealed, unvegetated surface is of no ecological value **therefore, it has been screened out of this assessment.**

5.10. This habitat was assessed as being in moderate condition.

Modified grassland (Target notes 4 and 5, appendix IV and XII)

5.11. There were areas of longer sward grassland in poor condition towards the southwest of the site, where the ground had been left undisturbed for some time. A small area of scattered bramble (*Rubus fruticosus* agg.) was present in the centre of the grassland. Species present included abundant perennial rye-grass (*Lolium perenne*), locally abundant bramble, butterfly bush (*Buddleja davidii*) and hedge mustard (*Sisymbrium officinale*), locally abundant and frequent white clover (*Trifolium repens*), frequent red fescue (*Festuca rubra*), Yorkshire-fog and creeping bent, locally frequent creeping buttercup (*Ranunculus repens*), oxeye daisy (*Leucanthemum vulgare*) and creeping thistle and rare pendulous sedge (*Carex pendula*).

Species poor native hedgerow (Target notes 6,7 and 8, appendix IV and XII)

5.12. A species poor native hedgerow in poor condition was present on the northwest boundary of the site. It was heavily flailed and measured approximately 90 metres in length, two metres in height and one metre in width. The hedgerow had large gaps caused by damage, with materials stored very close to the southern boundary and evidence of disturbance, such as tyre tracks, close to the northern boundary. Species recorded included abundant elder (*Sambucus nigra*) and dominant hawthorn (*Crataegus monogyna*). Species in the ground flora included locally dominant ivy (*Hedra helix*), frequent cock's-foot, red fescue, cow parsley (*Anthriscus sylvestris*) and lords-and-ladies (*Arum maculatum*), locally frequent cleavers (*Galium aparine*) and occasional white dead-nettle (*Lamium album*).

Sparsely vegetated urban land (Target note 9, appendix IV and XII)

5.13. Sparsely vegetated urban land was present to the east of the site. The majority of the habitat was disturbed gravel and earth that has been colonised quite heavily in places but not yet transitioned into grassland. Species recorded were consistent with those recorded within the unvegetated, unsealed surface. However, more species not recorded within the unvegetated, unsealed surface were present which included locally abundant white clover and hedge mustard,

frequent red fescue, dandelion (*Taraxacum officinale*) and common ragwort (*Jacobaea vulgaris*) and locally frequent petty spurge (*Euphorbia peplus*).

Assessment of habitats

5.14. The level of value of these habitats is summarised in table 4 below.

Table 4: Level of value of habitats recorded within the site.

IEF	Evaluation rationale	Value of IEF
Developed sealed surface	This habitat has no ecological value	Negligible
Artificially unvegetated unsealed surface	An area of artificially unvegetated unsealed surface is located adjacent to the developed land sealed surface. It is mainly unvegetated due to disturbance with small patches of vegetation along the margins and several piles of aggregate were present with a narrow pile along the eastern boundary. This is a common habitat at local, county and national level that can support a limited range of flora and fauna.	Negligible
Modified grassland	A section of modified grassland was present in the southwest of the site with a small area of bramble present in the centre of the grassland. This is a common habitat at local, county and national level that can support a limited range of flora and fauna.	Local
Species poor native hedgerow	Species poor native hedgerow was present in the northwest boundary of the site. Some native species are present however this habitat is managed short which reduces its value for wildlife. This is a common habitat at local, county and national level that can support a limited range of flora and fauna.	Local
Sparsely vegetated urban land	Large areas of sparsely vegetated land were present in the east of the site. This is a common habitat at local, county and national level that can support a limited range of flora and fauna.	Local

Habitats and features in the surrounding area

5.15. The wider site is surrounded by arable fields with Knowle village to the west of the site. **The surrounding habitats will be unaffected by the proposals and have therefore been excluded from this assessment.**

Protected, notable and invasive species

- 5.16. HBIC was contacted for records of protected and notable species within a two-kilometre radius of the site. Full results are provided in appendix III however, records of note returned include sixteen species of bat, records of great crested newt, hazel dormouse, badger, and hedgehog (*Erinaceus europaeus*).
- 5.17. The combined desk study, habitat survey and previous survey data for the site was used to provide the baseline data for this EclA assessment.
- 5.18. The results of the protected/notable species data search and surveys together with an evaluation of each species, are referred to by their common and scientific names

Badger

- 5.19. The site, its boundaries and a 30-metre buffer zone around the site (where access was possible), were surveyed for badger evidence such as setts, latrines, pathways, footprints, snuffle holes, and badger fur (English Nature, 2002). The survey was undertaken by ecologist Nikkii Hesketh-Roberts on 13th March 2026.
- 5.20. HBIC returned 4 records of badger within two kilometres of the site. There was no evidence of badger activity in any part or within 30 metres of the site's boundaries. No signs of badger activity such as setts, hair or footprints were recorded within the red line boundary during the survey. Evidence of badger have been recorded within the wider site, and therefore the site is considered to be used by foraging and commuting badger.

Bats: Roosting

- 5.21. Sixteen species of bat were returned by HBIC including greater horseshoe (*Rhinolophus ferrumequinum*), Barbastelle (*Barbastella barbastellus*), serotine (*Eptesicus serotinus*), *Myotis* bat species (*Myotis* sp.), Bechstein's bat (*Myotis bechsteinii*), Daubenton's bat (*Myotis daubentonii*), whiskered bat (*Myotis mystacinus*), Natterer's bat (*Myotis nattereri*), noctule (*Nyctalus noctula*), pipistrelle (*Pipistrellus*), Nathusius's pipistrelle (*Pipistrellus nathusii*), common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle, long-eared bat (*Plecotus* sp.), brown long-eared bat and bat species (*Chiroptera* sp.).
- 5.22. Three European protected species (EPS) licences for bats were granted within two kilometres of the site:
- Licence EPSM2011-3509 allowed the destruction of a non-breeding site for common pipistrelle and brown long-eared. This licence is located 0.18 kilometres east of the site.

- Licence EPSM2011-3509 allowed the destruction of a non-breeding site for common pipistrelle and soprano pipistrelle, located 1.4 kilometres north of the site.
- Licence EPSM2010-2447 allowed the destruction of a non-breeding site for brown long-eared bats, located 2 kilometres east of the site.

Bats: Foraging and Commuting

- 5.23. The habitats on site, and the habitats they connect to were assessed for their suitability to support foraging and commuting bats in accordance with the Bat Conservation Trust guidelines (BCT 2016). The Welborne site is of moderate quality for foraging and commuting bats, due to good connectivity within the wider landscape, and presence of high-quality foraging habitat, however the site itself is considered to hold low quality due to the site comprising primarily of developed land sealed surface with areas of modified grassland and sparsely vegetated land of ruderals with a section of species poor native hedgerow along the northern boundary.
- 5.24. Bat activity surveys were undertaken across the wider site between April and September 2022, with two transect routes being located either on or within habitats adjacent to the site, as shown in appendix V. The full results of the activity transect surveys are provided as appendix VI. Seven species of bat were recorded across the site during the activity transects, including common pipistrelle, soprano pipistrelle, noctule, serotine and *Myotis* species, long-eared (*Plecotus* sp.) with one brief registration of the Annex II species, barbastelle in May 2022 along the green transect around 10 metres outside of the site to the north along the eastern boundary of Raven's Wood. It is worth noting that barbastelle was also recorded at the end of the September survey along the edge of the arable field to the west of Dean Farm, although this is approximately one kilometre to the south of the site boundary.
- 5.25. The blue transect route covered the section of the site running along the southern boundary treeline and is the main transect of relevance to this current site. It also incorporated the southern section of Raven's Wood / Dashwood Copse to the far north-western corner of the Welborne site. Low numbers of common and soprano pipistrelle bats were recorded during all transect surveys, with four common pipistrelle bats being recorded at the same time along Knowle Road in September. Low numbers of noctule were recorded in April and September. A long-eared bat was recorded during the July transect, and serotine and *Myotis* species of bat were recorded in September. Activity levels were generally found to be low across the blue transect.
- 5.26. The southern-most sections of the green transect fell adjacent to the wider site's northern boundary. Low numbers of soprano pipistrelle bats were recorded commuting and foraging during all months, with low numbers of common pipistrelle recorded during all months except for April. The greatest activity levels

were recorded during May with four species being recorded in addition to soprano and common pipistrelle. Low numbers of serotine, noctule and Myotis species were recorded with a barbastelle being recorded foraging along the woodland edge outside the wider site boundary to the north-west.

- 5.27. Seven species were recorded during the static monitoring, including barbastelle, serotine, Myotis species, noctule, common pipistrelle, soprano pipistrelle and long-eared species. The Annex II species barbastelle was recorded, with 28 of the total of 29 passes for this species being recorded in June.
- 5.28. In accordance with the methodology set out in Wray et al (2010) for valuing bats for ecological impact assessments, both foraging and commuting habitat achieved a score of 31 which is indicative of **regional importance**. The full results of this are included in appendix VI.

Bird nesting and foraging

- 5.29. 84 species of bird were provided by HBIC within two kilometres of the site such as white-tailed eagle (*Haliaeetus albicilla*), short-eared owl (*Asio flammeus*), kestrel (*Falco tinnunculus*), osprey (*Pandion haliaetus*), sandwich tern (*Thalasseus sandvicensis*) and barn owl (*Tyto alba*).
- 5.30. The habitats on site were assessed for their potential to support nesting birds. The species poor native hedgerow holds limited potential to support nesting birds, and no nests were recorded during the survey in March 2026.

Great crested newt

- 5.31. HBIC returned two records of great crested newts within a two-kilometre radius of the site. According to MAGIC maps, one European Protected Species Mitigation (EPSM) licence for great crested newts has been granted 1.3 kilometres south of the site, but there are no pond survey or class survey licence returns within two kilometres of the site.
- 5.32. The site is within a green zone on the NatureSpace Partnership GCN impact risk zone map (Fareham Borough Council Impact Risk Zones). Green zones contain moderate habitat suitability for great crested newts.
- 5.33. The site provides limited terrestrial habitat for great crested newt due to the site containing species poor native hedgerow and longer sward modified grassland. However, most of the site is considered to be suboptimal habitat due to the site comprising developed land and sealed surface, sparsely vegetated urban land or artificially unvegetated unsealed land. Also, there are no ponds on-site, but one ditch was identified 142 metres from the site and therefore within the 250-metre average dispersion range. The terrestrial habitats on site although limited, are considered suitable for newts due to foraging opportunities provided in the species poor native hedgerow and modified grassland. The habitat on site is well connected to other suitable habitat in the wider landscape to the north of the M27.

- 5.34. Targeted eDNA surveys for great crested newt were undertaken on the 19th April 2022 on three ponds and two ditches within the wider site boundary, the closest being pond 2 located 566 metres from the site. The surveys were undertaken by licensed ecologist Aimee Cokayne (2019-39595-CLS-CLS), where water samples are collected and sent for analysis. The results of these surveys were negative for great crested newt DNA and are shown in appendix XI. **Great crested newt has therefore been screened out of this assessment.**

Hazel dormouse

- 5.35. HBIC returned 11 records of hazel dormouse within a two-kilometre radius of the site. Habitats on site were assessed as providing low suitability habitat for the hazel dormouse, due to the site comprising species poor native hedgerow which does not comprise of suitable food plants to support a sustainable population, has large gaps and managed regularly and lacks connectivity to surrounding woody habitat which is required to support the territory range of this arboreal species.
- 5.36. According to MAGIC there have been three EPSM licences for hazel dormouse granted within two kilometres of the site:
- 2019-39287-EPS-MIT – Allowing for the destruction of breeding and non-breeding sites and for the works to affect breeding sites, located 1.8 kilometres south of the site.
 - 2018-33164-EPS-MIT – Allowing for the works to affect breeding sites, damaged breeding and non-breeding sites and the destruction of breeding and non-breeding sites, located 1.8 kilometres west of the site.
 - 2020-46910-EPS-MIT – Allowing for the destruction of breeding and non-breeding sites and for the works to affect breeding sites, located 1.9 kilometres south of the site.
- 5.37. Three hundred and twenty-five dormouse nest tubes were deployed across the wider site in suitable habitat. Hazel dormouse surveys were undertaken between May and September 2022 by licensed ecologist Aimee Cokayne (2019-042601-CLS-CLS). Full results are provided in appendix VIII. Hazel dormouse nests were recorded 213 metres south of the site and 262 metres north-east of the site within the wider site boundary. Hazel dormouse nests and hazel dormice were also recorded in the wider landscape in habitats with connectivity to the site, in particular habitats adjacent to the A32 both to the north-east and south-east of the site,

Reptiles

- 5.38. HIBC returned 19 records of reptiles within two kilometres of the sites, including slow-worm, grass snake, adder and common lizard.

- 5.39. The habitats on site were assessed for their potential to support foraging and commuting reptiles. in accordance with *Reptile surveys. An introduction to planning, conducting and interpreting surveys for snake and lizard conservation.* (Froglife, 1999). High quality reptile habitat holds a mixed height sward of grassland habitats with areas of refuge, shelter and hibernation.
- 5.40. The site comprises modified grassland which is suitable for reptiles due to the long sward and the species poor native hedgerow could support a small population of common reptile species. However, the site is fragmented from other suitable habitats by urban developed habitats which pose a barrier to reptile species dispersion.
- 5.41. Reptile population surveys were undertaken across the wider site, with 300 refugia deployed in suitable reptile habitat. Results of the survey have confirmed presence of a maximum count of 34 slow worms, two grass snakes and one common lizard during any one survey, with no records of reptiles within the red line boundary. The full results and the locations of where reptiles have been recorded are provided in appendix VII.

Assessment of the site's value for key fauna

- 5.42. The level of value of the site for protected species is summarised in table 5 below:

Table 5: Level of value of species recorded within the site.

IEF	Evaluation rationale	Value of IEF
Badger	No evidence of badgers was identified on site. The habitats could provide a suitable foraging and commuting habitat along with opportunities for sett creation.	Local
Bat foraging and commuting habitat	The site offers some foraging habitat such as species poor native hedgerows. Seven species of bat were recorded during the activity transects and static monitoring including the Annex II species barbastelle.	Regional
Nesting and foraging birds	The species poor native hedgerow habitat on site provides opportunities for nesting birds and foraging birds.	Local

IEF	Evaluation rationale	Value of IEF
Hazel dormouse	The site comprises species poor native hedgerow which is of low suitability for hazel dormouse due to the hedgerow not being well connected to suitable woody habitat, being regularly managed with large gaps and lacks suitable food sources. However, hazel dormouse nests were recorded within the wider site boundary with connectivity to the site during the 2022 surveys.	Regional
Reptiles	The site comprises modified grassland which is suitable for reptiles due to the long sward and the species poor native hedgerow could support a small population. Grass snake, common lizard and slow worm are known to be present within the wider landscape, with no reptiles recorded within the red line boundary.	Local

6.0 ASSESSMENT OF POTENTIAL IMPACTS

- 6.1. The potential ecological impacts have been assessed against the application for reserved matters approval for the residential development known as Phase 3b for 75 residential units on land near Funtley, including associated parking and landscaping.
- 6.2. Potential impacts on identified ecological features of at least local value or subject to any legal or policy considerations are outlined in this section. The ecological features subject to assessment from this point on are therefore limited to the following:
- Portsmouth Harbour Ramsar / SSSI (International)
 - Solent and Southampton Water SPA (International)
 - Solent Maritime SAC (International)
 - Botley Wood and Everett's and Mushes Copses SSSI (National)
 - Blakes Copse SINC, Carpenters Copse SINC, Martin's Copse SINC, Birchfrith Copse SINC, Knowle Copse/Dash Wood/Ravens Wood SINC and Homerhill Copse and The Hanger SINC (Regional)
 - Modified grassland (Local)
 - Species poor native hedgerow (Local)
 - Badger (Local)
 - Bats: Foraging and commuting habitat (Regional)
 - Hazel dormouse (Regional)
 - Nesting birds (Local)
 - Reptiles (Local)

Construction phase impacts

Statutory designated sites

Portsmouth Harbour Ramsar/SSSI

- 6.3. Portsmouth Harbour Ramsar/SSSI lies 3.53 kilometres south of the application site. Although there will be no direct loss of these sites there is potential for indirect impacts from noise, dust and pollutants to enter these sites to cause damage to flora and fauna using these sites. The IEF's is of **international and national value**, the magnitude of these effects is **minor**, and therefore, the impact from disturbance and habitat degradation during the construction phase is

considered to be a certain **minor adverse impact** at **international and national level** which is **significant**.

Solent and Southampton Water SPA

- 6.4. Solent and Southampton Water SPA lies 5.0 kilometres west of the application site. There will be no direct loss of this site and due to the distance from the site, there is no potential for indirect impacts from noise and dust during construction to enter the site.
- 6.5. The IEF is of **international value**, the magnitude of the impact from construction works is **negligible** and therefore, the impact from disturbance and habitat degradation is considered to be negligible and **not significant**.

Solent Maritime SAC

- 6.6. Solent Maritime SAC lies 5.0 kilometres west of the application site. There will be no direct loss of this site and due to the distance between the application site and the designated site, there is no potential for indirect impacts from noise, dust and pollutants to enter the site to cause damage to flora and fauna.
- 6.7. The IEF is of **international value**, the magnitude of the impact from construction works is **negligible** and therefore, the impact from disturbance and habitat degradation is considered to be negligible and **not significant**.

Botley Wood and Everett's and Mushes Copses SSSI

- 6.8. Botley Wood and Everett's and Mushes Copses SSSI lies 2.0 kilometres west of the application site. There will be no direct loss of this nationally designated site but there is potential for indirect impacts from noise, dust and pollutants to enter these sites to cause damage to flora and fauna using these sites. The IEF's are of **national value**, the magnitude of these effects is **minor**, and therefore, the impact from disturbance and habitat degradation during the construction phase is considered to be a certain **minor adverse impact** at **national level** which is **significant**.

Non-statutory designated sites

SINCs

- 6.9. A series of six SINCs are present within one kilometre of the development. The closest is Blakes Copse SINC which is 0.32 kilometres to the north, with the remainder ranging from 0.52 to 1 kilometre from the site. Due to the nature of the proposals and the intervening distances of these sites, adverse impacts from habitat loss, degradation or disturbance are not anticipated. These IEFs are of regional value, the magnitude of effect is **negligible** and therefore **not significant**.

Habitats

Modified grassland

- 6.10. The proposals will result in the loss of areas of modified grassland. This habitat is common and widespread. The IEF is of **local value**, the magnitude of the impact from loss of habitat is **medium and not significant**.

Species poor native hedgerow

- 6.11. The proposals will result in the loss of areas of species poor native hedgerow and potentially cause damage to root systems. This habitat is common and widespread. The IEF is of **local value**, the magnitude of the impact from loss of habitat is **medium and not significant**.

Protected and notable species

Badgers

- 6.12. During construction, there is potential to cause damage to badger setts if any are created within a 20-metre radius of the works. In addition, any trenches left open overnight could cause entrapment. As the IEF is of **local value**, the magnitude of the effect is considered to be **low** and therefore, **not significant**.

Bats: foraging and commuting

- 6.13. The site offers potential for foraging and commuting bats within the wider landscape. A variety of bat species have been recorded foraging and commuting on site, including seven species during the 2022 activity and static monitoring surveys, with barbastelle being recorded in habitats to the north-west and south of the site. There will be some limited loss of foraging habitat, and disturbance during construction work through a potential increase in lighting. It is considered likely that the IEF is of **regional** importance and the magnitude of effect is considered to be **low**, and the impact is therefore of **minor significance**.

Reptiles

- 6.14. The site offers limited suitable habitat for reptiles in the hedgerow habitat, and surveys to date indicate that an exceptional population of slow worm is present in the wider site. There are also known records of common species, including common lizard, in the local area and wider Welborne site. In the absence of mitigation, it is likely that reptiles would be harmed during site clearance. It is considered likely that the IEF is of **local** importance and the magnitude of effect is considered to be **medium**, the impact is therefore **not significant**.

Hazel dormouse

- 6.15. The proposals will result in the loss of a small section of species poor native hedgerow that could be used by hazel dormouse. Furthermore, hazel dormouse nests have been recorded outside of the redline boundary, within the wider site, in

areas which are well connected to the proposed development area. The majority of the site is of sub-optimal habitat for these species. The IEF is of **regional** importance, and the magnitude of effect is considered to be **medium**, the impact is therefore of **minor significance**.

Nesting birds

- 6.16. The Wildlife and Countryside Act 1981, as amended, provides protection to the nests of wild birds from being taken, damaged or destroyed while in use or being built and their eggs are protected from being taken or destroyed. Additional protection is provided to Schedule 1 breeding birds, where both adults and their young, are protected from intentional or reckless disturbance, at, on or near an active nest.
- 6.17. There will be a loss of nesting habitat as a result of the removal of a section of species poor native hedgerow during the construction works. In the absence of mitigation, this would have a low risk of damaging or destroying active nests. Noise and visual disturbance associated with construction activity may impact on species nesting close to the development site. The IEF is of **local** importance, and the magnitude of effect is considered to be **low and is not significant**.

Operational phase impacts

Statutory designated sites

- 6.18. Once operational, the proposed development is considered to have adverse impacts and effects on Solent and Southampton Water SPA, Solent Maritime SAC, Portsmouth Harbour Ramsar/SSSI and Botley Wood SSSI and Everett's and Mushes Copses SSSI from an increase in recreational pressure.
- 6.19. These designated sites comprise sensitive, botanically diverse habitats, including mudflats, coastal lagoons, salt meadows and chalk grassland. which can all be impacted by increases in recreational visitor numbers leading to adverse effects, such as the degradation of habitats via trampling and poaching of the ground by high numbers of walkers and cyclists, localised soil erosion caused by excessive use of footpaths, and increases in litter and dog faeces. These sites also support internationally important populations of breeding birds, including dark-bellied brent geese (*Branta bernicla*), which are highly vulnerable to disturbance by recreational visitors and dog walkers.
- 6.20. During the operational phase, there will be a net increase in visitors to these sites. These IEF's are of **international and national value**, the magnitude of the operation impacts from increased recreational pressures will be **low**, and of **minor significance**.

Non-statutory designated sites

- 6.21. Due to the nature of the proposals and the intervening distances of these sites, adverse impacts to these sites once operational are not anticipated. These IEFs are of **regional value**, the magnitude of effect is **negligible** and therefore **not significant**.

Protected and notable species

Badgers

- 6.22. There is potential for increased in road traffic collisions due to increase in visitors and residents at the site. The IEF is of **local value**, the magnitude of the impacts will be **low**, and **not significant**.

Bats (Foraging and Commuting)

- 6.23. The site offers potential for commuting and foraging bats within the wider landscape. A variety of bat species have been recorded foraging and commuting on site. An introduction of lighting along Knowle Road and throughout the development would have adverse effect on the quality of the development site for foraging and commuting bats, in particular light sensitive bat species such as barbastelle, *Myotis* and brown long-eared. The IEF is of **regional** importance and the magnitude of effect is considered to be **medium**, the impact is therefore of **minor significance**.

Nesting and foraging birds

- 6.24. There is potential for increased disturbance to bird species using the site and adjacent habitats through increased residents and cat predation due to increased cat ownership at the site. There is a chance of disturbance to nesting birds if habitats are managed during the key nesting bird season. As the IEF is of **local** importance, the likelihood and magnitude of the effect is expected to be **low** and is therefore **not significant**.

Reptiles

- 6.25. There is potential that if habitat management is undertaken at an inappropriate time of year foraging and basking reptiles could be disturbed, harmed, damaged or destroyed. The development will result in increased lighting, severance of habitat and disturbance from recreational use and an increase in cat predation. The IEF is of **local** importance and the magnitude of effect is considered to be **medium**, the impact is therefore **not significant**.

Hazel dormouse

- 6.26. There is potential that management of the hedgerow on the site could be timed during the nesting season when young are dependent on the adults. The development will also result in increased lighting, and disturbance from

recreational use. The IEF is of **regional** importance, and the magnitude of effect is considered to be **medium**, the impact is therefore of **minor significance**.

7.0 MITIGATION

- 7.1. Whilst most of the impacts identified in section 6 are not significant, there is a legal duty to ensure that designated sites, habitats and species do not suffer from adverse impacts or reduction in natural and no harm occurs to individuals of protected species. Mitigation outlined in this section therefore addresses all significant impacts and any legal duties where impacts were not significant.

Construction phase

Statutory and non-statutory designated sites

- 7.2. Potential impacts on statutory site during construction from dust generation and deposition, from construction traffic, and from pollution incidents were identified. A Construction Environmental Management Plan (CEMP) will be prepared and implemented to mitigate for the potential impact on these designated sites and negate any potential for adverse impact on other sites as a measure of best practice. The following matters will be addressed in the CEMP:
- Briefing all site personnel and contractors about the presence and importance of the adjacent designated sites and ensuring that no littering occurs.
 - Details of how materials, fuel and chemicals will be stored and controlled on-site to avoid pollution and siltation for example all construction materials will be stored appropriately in specific designated areas to avoid potential pollution incidents and creation of dust.
 - All plant will be fitted with drip trays in order to avoid potential pollution incidents and re-fuelling of plant/vehicles will either take place off site or within a specific designated area on site.
 - Details on the proposed construction methodology including factors such as construction access, methods of construction, timing of work and working hours.
 - Industry standard dust suppression methodology.
- 7.3. The application site lies within five kilometres of Solent and Southampton Water SPA. The mitigation set out in 7.2 will reduce the level of impact to **negligible** and therefore **not significant** on the site.

Habitats

Species poor native hedgerow

- 7.4. Heras fencing will be implemented around the retained sections of hedgerow as a buffer zone in order to protect them before works commence. Also, there is a BSI (BS 5837) standard for tree and hedgerow protection in regard to managing trees and hedgerows in proximity to construction activities which should be used in within this area.
- 7.1. Hedgerow removal will be carefully planned to minimise unnecessary disturbance, with clearance undertaken outside of the bird breeding season where possible.
- 7.2. The mitigation such as new native hedgerow being planted will reduce the impact from being minor to **not significant**.

Protected and notable species

Badgers

- 7.3. No evidence of badgers was recorded within the development boundary, included snuffle holes and scat. However, there is a chance that a commuting badger could be found on site.
- 7.4. The following safeguarding measures for badgers during construction will be included in the CEMP and implemented as a measure of best practice:
- To avoid any entrapment of mammals in open excavations, any open trenches should be left covered over night or have suitable ramp to provide an exit point for any nocturnal mammals.
 - Install Heras fencing in areas where it is important to exclude badgers for safety reasons e.g. fuel storage areas.
 - Any topsoil, aggregates or other material piles will be stored within a designated area well away from the retained woodland. These will be regularly inspected to ensure they are not being used by badgers.
 - Night-working will not be permitted to avoid disturbance to badger.
- 7.5. The mitigation measures described above will ensure that the magnitude of impacts on badgers during the construction phase is **negligible**.

Bats: Foraging and commuting

- 7.6. Disturbances to foraging and commuting bats can be expected from increased noise and lighting.
- 7.7. The development will include measures to limit lighting impacts during the construction phase as a measure of best practice. During the construction phase,

to ensure foraging or commuting bats are not impacted, there will be restrictions on working hours and the use of external lighting systems. Working hours will be limited to daylight hours after 08:00 and conclude at least an hour before sunset during the summer months when bats are most active. This will be detailed within the CEMP for the development. Landscaping proposals included in the Welborne Mile and associated infrastructure Reserved Matters Application will also increase the biodiversity value of the site and has been designed in accordance with the approved Biodiversity Enhancement Strategy (Holbury Consultancy, 2020).

- 7.8. The mitigation measures detailed above will ensure the magnitude of impacts on foraging and commuting bats during the construction phase are reduced to **negligible**.

Hazel dormouse

- 7.9. The hazel dormouse is present within the wider site, with the nearest hazel dormouse being 200 metres from the redline boundary. A section of the hedgerow on site is proposed for removal, the impacts from the construction phase on the hazel dormouse will be mitigated through the planting of native hedgerow along the northern boundary and the CEMP as detailed above, to ensure there are no accidental incidents to habitats on site and adjacent to the site which are known to support the hazel dormouse, it would also be recommended to conduct a pre-works check of the hedgerow before the removal to confirm no hazel dormice or nests are present.
- 7.10. In addition, a site wide mitigation strategy, has been developed to ensure suitable habitat for hazel dormouse will be available across the wider Welborne site, and protected during construction. The Welborne Mile SANG will provide a large proportion of this replacement habitat, where existing hedgerows will be enhanced, additional hedgerows created and scattered trees and scrub planted to provide connectivity at a site wide scale, and a plan showing this has been provided in appendix IX. Further detail on mitigation planting has also been provided in appendix X, and this shows further detail on the proposed planting in the north of the site, linking Dashwood and Blake's Copse. All of this planting is located outside of the red line boundary with hedgerow and scrub will be planted north and west of the site within the wider application site boundary, a section of scrub will be planted north of the site just outside of the wider application site boundary, separate sections of hedgerow will be planted in the north, east and west of the wider application site boundary, semi-natural grassland with scattered scrub will be planted in the west of the wider application site and mitigation planting (M27 J10) being planted in the south of the wider application site boundary.
- 7.11. The mitigation measures detailed above will ensure the magnitude of impacts on hazel dormouse during the construction phase are reduced to **negligible**.

Reptiles

- 7.12. An exceptional population of slow worm has been recorded within the wider site, with no reptiles recorded within the red line boundary. The ecological clerk of works will be maintained during clearance of any suitable reptile hibernation and sheltering features such as log and rubble piles affected by the proposed infrastructure works. The suitably qualified ecologist will work alongside construction plant and conduct a destructive search and strim and push for reptiles. This will be undertaken in the reptile active season between March and October when the temperatures are above 10 °C. Any reptiles found are safely re-located to retained habitats outside the works area. Where reptiles are encountered during the strim and push exercise, reptiles will be relocated to the tussocky grassland habitat along the edge of Dashwood and Blake's Copse which already supports suitable, established tussocky grassland, with tree and shrub planting and installation of hibernacula and loggeries.
- 7.13. Any topsoil, aggregates or other material piles will be stored within a designated area well away from the construction zone to ensure reptiles do not colonise these areas. This should be stored on pallets, within skips or in areas unsuitable to support reptiles.
- 7.14. There is potential for reptiles to be present in the hedgerow and modified grassland within the redline boundary. Although the adverse impact on reptiles during the construction phase was not significant, and the likelihood of encountering a great crested newt or reptile during the works was considered very low, a precautionary approach will be applied under a non-licensed method statement. The methodology will include:
- To encourage reptiles on the site to move away from the works area naturally, the habitat within the works area will be made unsuitable by habitat manipulation. Vegetation will be strimmed in two phases. The first cut will be down to 15 centimetres and left for an hour to allow any reptiles to move out of the area. The second cut will be down to ground level.
 - Materials and any arisings will be kept off the ground through the use of skips or pallets. This will negate any risk of reptiles and great crested newts sheltering within stockpiled materials or arisings from site clearance.
 - The removal of the vegetation will be carried out during the reptile active season March-September, inclusive, and when temperatures are above 10°C. Any reptiles found will be moved by the ecologist and put into suitable habitat adjacent to the site.
 - Clearance of potential hibernation and sheltering features, such as hedgerows and compost areas, will be supervised by an ecologist. A pre-works checks of the area will be conducted to check for any reptiles. Any reptiles found will be moved to a safe area in within the wider site. Clearance of these areas will be undertaken during the active season, avoiding the

winter hibernation period or periods of hot weather during the summer, to reduce the likelihood of encountering hibernating or inactive reptiles.

- Remaining groundworks should be timed to take place during the winter period, when these species are rarely active above ground. If this is not feasible, the duration of groundworks should be kept as short as possible, and works should be restricted to daylight hours.

7.15. The above mitigation measures will ensure that no adverse impacts will occur to reptiles or great crested newts during the construction works. Modified grassland will also be created within the proposals which can provide suitable reptile habitat.

Nesting birds

7.16. Any works to remove hedgerow habitat to facilitate the development should be undertaken outside of the breeding bird season, where possible, which runs from March to August inclusive. If this not possible a nesting bird check will be conducted on impacted suitable habitats and in a radius of five metres, immediately before the works. If a bird is discovered nesting, a cordon of five metres will be installed around the nest. The works will cease around the nest and will be able to resume once the chicks have fledged.

7.17. The above measures will reduce the impacts on nesting birds to **negligible**.

Operational phase

Statutory sites

7.18. The wider Welborne development area and layout incorporates a high level of quality green infrastructure, including the Welborne Mile SANG, and Dashwood SANG, recreational spaces and facilities, sports pitches, children's play areas, and an extensive network of quality footpaths. These elements of the wider scheme will divert recreational pressures, especially dog walking, away from the identified statutory European protected sites (Solent and Southampton Water SPA and Ramsar, Solent Maritime SAC, Portsmouth Harbour Ramsar and SSSI and Botley Wood and Everett's and Mushes Copses) and the non-statutory sites. There will also be information leaflets provided to all new homeowners on the site to inform them about the local recreational areas, facilities and walking routes that are available across the wider Welborne development zones. It is considered that these measures will effectively mitigate the risks of any long-term adverse indirect impacts on identified designated sites during the operation phase of the development to an acceptable level.

7.19. The above will reduce the impacts to **low** and **not significant**

Habitats

- 7.20. Habitats within the wider site will be managed in accordance with the Biodiversity Mitigation Strategy (Holbury, 2020), and management plans.

Protected and notable species

Badger

- 7.21. The proposed off-site habitat creation and enhancement measures across the wider Welborne development area will ensure that there is a suitable level of good quality habitat available for badgers within the locality during the operational phase. Furthermore, there is no need to mitigate against the increased risk of being hit by cars due to there being no evidence that the site is well used for commuting and foraging.

Bats commuting and foraging

- 7.22. All bat species are naturally light adverse. Artificial Light at Night (ALAN) targeting commuting and foraging routes will result in disruption to natural range. Any new lighting installed will require compliance with Guidance note 08/23 Bats and Artificial Lighting at Night (Institute of Lighting Professions (IPL), 2023).
- 7.23. Paragraph 4.29 outlines that 2700K should be considered when choosing luminaires and their potential impact on key habitats and features. It should be noted that this is only a consideration and relates specifically to the impacts upon important foraging and commuting features. Paragraph 5.47 also outlines the suitability of 3000K within residential areas, where other measures are applied to control light spill.
- 7.24. Higher lighting in the centre of the site can be used and will not have a significant effect on commuting and foraging bats due to this area not being identified as a key foraging area for bats. Lighting columns will be shielded within this area to direct light.
- 7.25. New lighting columns which are proposed along the northern edge of the site will remain at 2700K with shields to reduce light spill away from habitat to the north of the site where light sensitive bats were recorded close to Dashwood.
- 7.26. The mitigation measures detailed above will ensure the impacts on foraging and commuting bats during the operational phase are reduced to **negligible** and **not significant**.

Nesting and foraging birds, hazel dormouse and reptiles

- 7.27. Potential impacts were identified for these species relating to inappropriate timing for on-going management of habitats immediately adjacent to the site, with minimal habitat being left within the site once operational. However, retained tree line and hedgerows within and immediately adjacent to the site,

adjacent woodland and adjacent habitats where reptiles have been encouraged into during the trim and push exercise will be managed appropriately. The Biodiversity Strategy being prepared for the site for ongoing management and timing issues, and management will be implemented accordingly.

- 7.28. The impact of additional lighting as a result of the proposed development may impact the hazel dormouse, and as such the lighting mitigation described in paragraph 7.15 will be of benefit to reduce the impacts on the hazel dormouse.

8.0 ENHANCEMENTS

- 8.1. The following are recommended for ecological enhancement as part of the proposed development.

- An integrated bat box, swift box, sparrow terrace, house martin cup OR bee brick will be installed in all new residential dwellings. Where it is not appropriate to include a feature in a dwelling, two or more features will be installed on more suited dwellings to maintain a 1:1 ratio.
- For multiple occupancy residential buildings, an additional mitigation feature is to be added to the building.
- Small access holes will be placed into the gravel boards of all fence panels to allow hedgehog access for foraging across gardens. These will measure 13 centimetres by 13 centimetres.
- Landscape planting within the development will include native species where possible, or non-native species which are known to attract invertebrates, birds and small mammals such as hazel dormouse.
- Native trees will provide foraging habitat for a range of bird species such as field maple (*Acer campestre*).

9.0 RESIDUAL EFFECTS

- 9.1. No significant negative impacts from the proposed works were identified during the assessment, assuming all mitigation measures are implemented. The site offers opportunity for enhancement measures within this phase of development, and the Biodiversity Mitigation Strategy (Holbury, 2020), demonstrates a site wide approach to ensure the Welborne development provides replacement habitat.

10.0 IN-COMBINATION EFFECTS

- 10.1. There are numerous local planning applications for individual residential dwelling home improvements, including both two and single storey extensions, as well as loft and garage conversions.
- 10.2. The housing trajectory published in each Councils Strategic Housing Land Availability Assessments provides the planned number of homes expected to come forward over the period 2020/21-2024/25. For Fareham Council the trajectory indicates a supply of 2,705 homes within Fareham. The Welborne Garden Village development is separate from this.
- 10.3. The proposed development could potentially have adverse in-combination effects on all of the IEFs covered in this assessment due to it forming a part of the large-scale housing and urban infrastructure project across the wider Welborne development area. However, it is considered that the combination of the proposed on-site habitat creation and enhancement measures, and the Welborne site-wide biodiversity enhancement strategies and green infrastructure provision, will collectively ensure that a suitable level of mitigation for in-combination effects is provided, **it is considered that there will not be any significant adverse in-combination effects on identified ecological features within the zone of influence.**

11.0 CONCLUSION

- 11.1. The report has been provided in accordance with condition 28 of the outline planning consent. Habitat and faunal surveys were undertaken across the wider development site. Assessments of desk studies including the proximity to designated sites and protected and notable species were made.
- 11.2. Mitigation measures have also been provided including protecting retained habitats and a mitigation strategy for badger, bats, nesting birds, hazel dormouse and reptiles. Implementing these mitigation measures will ensure that there are not any residual effects.
- 11.3. This survey is valid for 18 months and should the works be delayed past this time then an updated survey will be required.

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APPENDIX I Site location plan



APPENDIX II Site proposals



APPENDIX III Desk study results

Table A1: Designated sites within five kilometres for international statutory sites, two kilometres for national statutory sites, and one kilometre for non-statutory sites.

Site name	Designation	Value	Distance	Description
Solent & Southampton Water	SPA ¹	International	5km west	The site qualifies for breeding populations of common tern (<i>Sterna hirundo</i>), little tern (<i>Sterna albifrons</i>), Mediterranean gull (<i>Larus melanocephalus</i>), roseate tern (<i>Sterna dougallii</i>), sandwich tern (<i>Sterna sandvicensis</i>); and overwintering black-tailed godwit (<i>Limosa limosa islandica</i>), dark-bellied brent goose (<i>Branta bernicla bernicla</i>), ringed plover (<i>Charadrius hiaticula</i>), teal (<i>Anas crecca</i>) and an internally important assemblage.
Solent Maritime	SAC ²	International	5km west	The Solent encompasses a major estuarine system on the south coast of England. Designated for its estuary, salt meadow, coastal lagoons, mudflats. Qualifying species include Desmoulins whorl snail (<i>Vertigo moulinsiana</i>).
Portsmouth Harbour	Ramsar ³	International	3.53km south	Portsmouth Harbour is a large industrialised estuary and includes one of the four largest expanses of mudflats and tidal creeks

¹ SPA - Special Protected Area

² SAC - Special Area of Conservation

³ Ramsar: Wetland of international importance designated under the Ramsar Convention

Site name	Designation	Value	Distance	Description
				on the south coast of Britain. The mudflats support large beds of narrowleaved and dwarf eelgrass (<i>Zostera sp.</i>), extensive green alga and sea lettuce (<i>Ulva sp.</i>). The site supports internationally important numbers of wintering dark-bellied brent geese (<i>Branta bernicla</i>) and nationally important numbers of grey plover (<i>Pluvialis squatarola</i>), dunlin (<i>Calidris alpina</i>) and black-tailed godwit (<i>Limosa limosa</i>).
Portsmouth Harbour	SSSI ⁴	National	3.53km south	Portsmouth Harbour SSSI is designated for its tidal lagoons, mudflats, supporting rare plants, invertebrates and waders. There is also an area of chalk grassland on Horsea island supporting a number of scarce plant species.
Botley Wood and Everett's and Mushes Copses	SSSI	National	2km west	The site is nationally recognised for its butterfly population including the pearl-boarded fritillary (<i>Boloria euphrosyne</i>), dark green fritillary (<i>Speyeria aglaja</i>) and purple emperor (<i>Apatura iris</i>). The site also has over fifty species of flowering plants typical of ancient woodlands.

⁴ SSSI - Special Site of Scientific Interest

Site name	Designation	Value	Distance	Description
Blakes Copse	SINC ⁵	Regional	0.32km north	Ancient semi-natural woodland.
Carpenters Copse	SINC	Regional	0.57km northeast	Ancient semi-natural woodland.
Martin's Copse	SINC	Regional	0.78km north	Ancient semi-natural woodland.
Birchfrith Copse	SINC	Regional	0.91km northwest	Ancient natural and semi-natural woodland and other woodland where there is a significant element of ancient semi-natural woodland surviving.
Knowle Copse/Dash Wood/Ravens Wood	SINC	Regional	0.92km northwest	Ancient semi-natural woodland. The site also qualifies for its population of hazel dormouse and great wood rush (<i>Luzula sylvatica</i>).
Homerhill Copse & The Hanger	SINC	Regional	1km east	Ancient semi-natural woodland

Protected Species

Records were provided by HBIC from the last 21 years for most species. A full copy of the data search can be provided on request however a summary is provided below.

Amphibians and reptiles

Records of five species of amphibian and reptile including great crested newt (*Triturus cristatus*), slow-worm (*Anguis fragilis*), grass snake (*Natrix natrix*), adder (*Vipera berus*), and common lizard (*Zootoca vivipara*) were provided from HBIC within two kilometres of the site.

Birds

Records of 83 bird species were provided by DERC within two kilometres of the site, including red kite (*Milvus milvus*), swift (*Apus apus*), nightjar (*Caprimulgus europaeus*),

⁵ SINC - Site of Importance for Nature Conservation

cuckoo (*Cuculus canorus*), Cetti's warbler (*Cettia cetti*), bullfinch (*Pyrrhula pyrrhula*) and firecrest (*Regulus ignicapilla*).

Higher plants

HBIC returned previous records of 32 species of higher plant, including birds nest orchid (*Neottia nidus-avis*), lesser quaking grass (*Briza minor*), dwarf spurge (*Euphorbia exigua*) and pale toadflax (*Linaria repens*).

Invertebrates

HBIC returned 1450 records of notable or protected species within two kilometres of the site, including, stag beetle (*Lucanus cervus*), Jersey tiger (*Euplagia quadripunctaria*) and dingy skipper (*Erynnis tages*).

Mammals

Bat records returned from HBIC included greater horseshoe (*Rhinolophus ferrumequinum*), serotine (*Eptesicus serotinus*), whiskered bat (*Myotis mystacinus*), Daubenton's bat (*Myotis daubentonii*), Natterer's bat (*Myotis nattereri*), Bechstein's bat (*Myotis bechsteinii*), noctule (*Nyctalus noctula*), Nathusius' pipistrelle (*Pipistrellus nathusii*), common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), brown long-eared bat (*Plecotus auritus*), barbastelle (*Barbastella barbastellus*), bat species (*Chiroptera sp.*), myotis species (*Myotis sp.*), pipistrelle species (*Pipistrellus sp.*) and long-eared species (*Plecotus sp.*).

HBIC informed of four records of badger (*Meles meles*), five records of brown hare (*Lepus europaeus*), eleven records of hazel dormouse, six records of hedgehog (*Erinaceus europaeus*), three records of otter (*Lutra lutra*), one record of polecat (*Mustela putorius*) and one record of water vole (*Arvicola amphibius*).

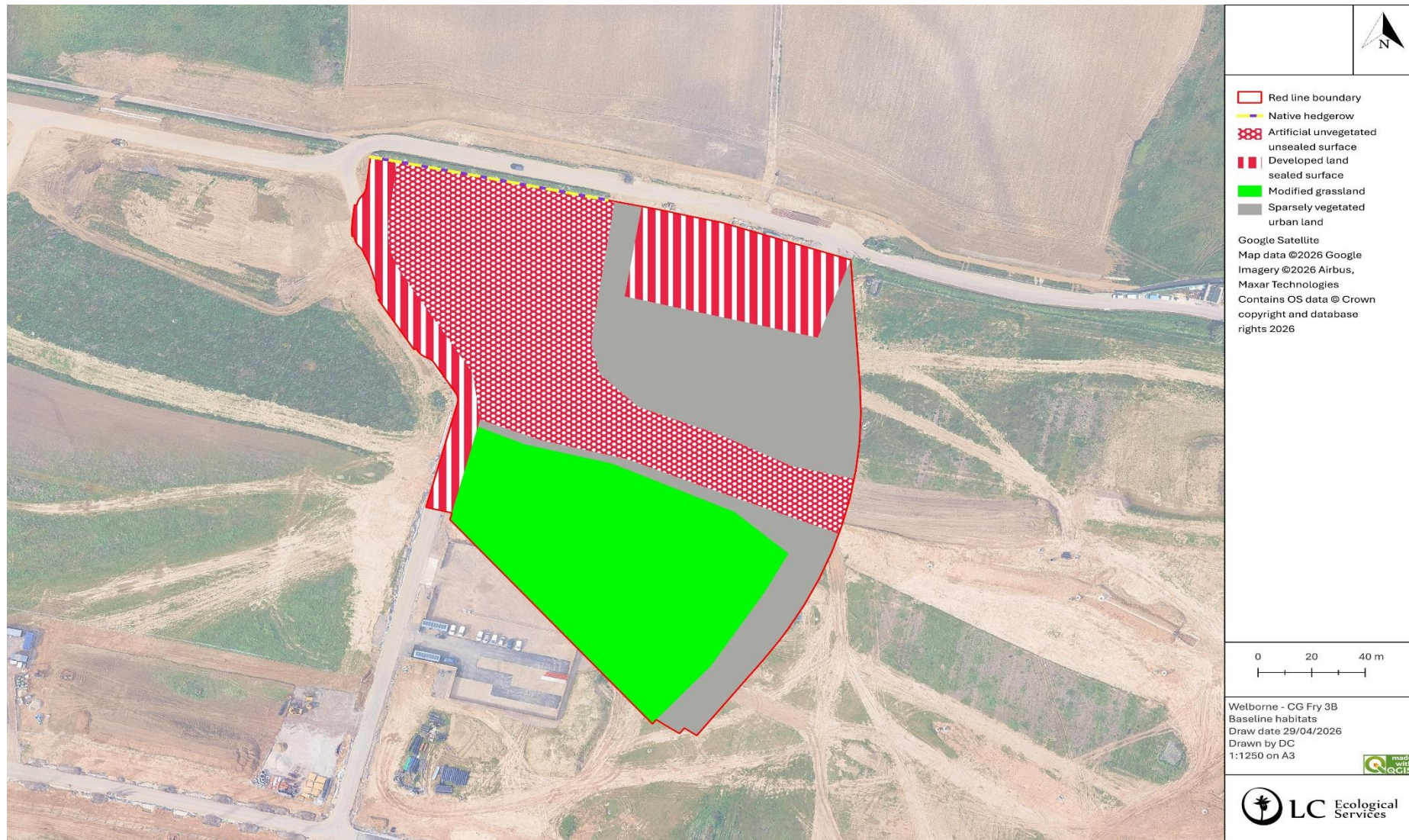
Granted European Protected Species Licences

Following a search of the MAGIC database within a two-kilometre radius of the site, a granted European Protected Species (EPS) licence applications of bats were recorded including one for common pipistrelle and brown long-eared approximately 0.18 kilometres east, one common pipistrelles and soprano pipistrelle approximately 1.4 kilometres to the north and one for brown long-eared bats approximately 2 kilometres east.

European Protected Species (EPS) licence applications of great crested newts and hazel dormouse were recorded, one for great crested newts approximately 1.3 kilometres south and three for hazel dormouse approximately 1.8 kilometres south, 1.8 kilometres west and 1.9 kilometres south.

These records of protected and notable species in the vicinity of the site increase the likelihood of them being present where suitable habitat is identified in the field survey.

APPENDIX IV UK Habitat Classification map



APPENDIX V Bat transect routes



APPENDIX VI Bat activity and static monitoring survey results

Blue transect

April 2022

BAT DETECTOR ACTIVITY SURVEY					
SURVEY LOCATION:	Welbourne Blue route	SURVEYORS:	Colin Sutch, Ewan Hitchcoe	DATE:	20/04/2022
TEMP AT START:	14.0°	SUNSET:	20:08	START TIME:	20:08
TEMP AT END:	13.0°	CLOUD COVER (oktas):	4/8	END TIME:	22:08
WIND (bft):	2/12	RAINFALL:	0	WEATHER:	Dry
Data Analysed Y/N:	Y	Additional information:	EMT-04 I-Pad 04		
(PLEASE ADD TRAGET NOTES TO MAP AND APPEND TO RECORDING FORM)					
TIME	STOPPING POINT/TARGET NOTE	SPECIES	NUMBER OF BATS	ACTIVITY (behaviour/ commuting/ direction/ foraging/ feeding/ feeding buzzes/ roost/ etc.	
20:08-20:11	A	-	-	No Activity	
20:20-20:23	B	-	-	No Activity	
20:25	B-C	Common pipistrelle	1	Brief call, heard not seen	
20:29	B-C	Soprano pipistrelle	1	Brief call, heard not seen	
20:35-20:38	C	-	-	No Activity	
20:47-21:06	D				
21:06	D	Common pipistrelle		Brief call, heard not seen	
21:13-21:16	E				
21:13	E	Common pipistrelle	1	Brief call, heard not seen	
21:25-21:28	F	-	-	No Activity	
21:37-21:40	G				
21:40	G	Common pipistrelle	1	Heard not seen, commuting	
21:48-21:51	A				
21:48	A	Noctule	1	Brief call, heard, not seen	

22:00-22:03	B	-	-	No Activity
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May 2022

BAT DETECTOR ACTIVITY SURVEY					
SURVEY LOCATION:	Welbourne Blue transect	SURVEYORS:	Aimee Cokayne, Jay van der Westhuizen	DATE:	21/05/2022
TEMP AT START:	14.0°	SUNSET:	20:59	START TIME:	20:59
TEMP AT END:	13.0°	CLOUD COVER (oktas):	1/8	END TIME:	22:59
WIND (bft):	1/12	RAINFALL:	0	WEATHER:	Mild/Clear
Data Analysed Y/N:	Y	Additional information:	EMT and IPAD		
	(PLEASE ADD TRAGET NOTES TO MAP AND APPEND TO RECORDING FORM)				
TIME	STOPPING POINT/TARGET NOTE	SPECIES	NUMBER OF BATS	ACTIVITY (behaviour/ commuting/ direction/ foraging/ feeding/ feeding buzzes/ roost/ etc.	
21:02-21:07	A	-	-	No Activity	
21:25-21:30	B				
21:28	B	Common pipistrelle	1	Brief calls, heard not seen	
21:45-21:50	C	-	-		
21:50	C	Common pipistrelle	1	Brief call, heard not seen	
22:05-22:11	D				
22:05-22:09	D	Common pipistrelle	1	Foraging near farm buildings, heard not seen	
22:10-22:11	D	Common pipistrelle	1	Foraging on the eastern elevation of buildings	
22:18-22:19	D-E	Common pipistrelle	1	Foraging along woodland fringe, heard not seen	
22:20	D-E	Soprano pipistrelle	1	Foraging near large oak tree next to the hedgerow, heard not seen	
22:24-22:33	E				
22:26	E	Soprano pipistrelle	1	Foraging in the woodland, heard not seen	
22:31-22:33	E	Common and	2	Foraging in the woodland, heard not seen	

		Soprano pipistrelle		
22:34-22:35	E-A	Common pipistrelle	1	Foraging near woodland edge, heard not seen
22:35-22:37	E-A	Serotine	1	Foraging along woodland fringe
22:38	E-A	Common pipistrelle	1	Foraging along hedgerow, heard not seen

June 2022

BAT DETECTOR ACTIVITY SURVEY					
SURVEY LOCATION:	Welborne Blue transect	SURVEYORS:	Colin Sutch, Lisa Sharp	DATE:	20/06/2022
TEMP AT START:	16.0°	SUNSET:	21:22	START TIME:	21:22
TEMP AT END:	13.0°	CLOUD COVER (oktas):	1/8	END TIME:	23:22
WIND (bft):	1/12	RAINFALL:	0	WEATHER:	Dry/cool
Data Analysed Y/N:	Y	Additional information:			
	(PLEASE ADD TRAGET NOTES TO MAP AND APPEND TO RECORDING FORM)				
TIME	STOPPING POINT/TARGET NOTE	SPECIES	NUMBER OF BATS	ACTIVITY (behaviour/ commuting/ direction/ foraging/ feeding/ feeding buzzes/ roost/ etc.	
21:22-21:27	A	-	-	No activity	
21:48 -21:53	B	-	-	No activity	
22:00	B-C	Soprano pipistrelle	1	Commuting from West to East	
22:03 +5	B-C		1	Commuting from West to East	
22:08	B-C	Common pipistrelle	1	Brief call, heard not seen	
22:09-22:14	C				
22:10	C	Common pipistrelle	1	Brief call, heard not seen	
22:11	C	Common pipistrelle	1	Commuting from East to West	
22:26	C-D	Common pipistrelle	1	Brief call, heard not seen	
22:28-22:34	D				

22:29	D	Common pipistrelle	1	Commuting from East to West
22:31	D	Common pipistrelle	1	Brief call, heard not seen
22:34	D	Soprano pipistrelle	1	Brief call, heard not seen
22:37	D-E	Soprano pipistrelle	1	Brief call, heard not seen
22:42	D-E	Soprano pipistrelle	1	Brief call, heard not seen
22:49-22:54	E			
22:51	E	Soprano pipistrelle	1	Brief call, heard not seen
23:00-23:05	F			
23:02-23:04	F	Common pipistrelle	1	Heard not seen foraging

July 2022

BAT DETECTOR ACTIVITY SURVEY					
SURVEY LOCATION:	Welborne Blue Transect	SURVEYORS:	Colin Sutch, Lisa Sharp	DATE:	14/07/2022
TEMP AT START:	22.0°	SUNSET:	21:14	START TIME:	21:14
TEMP AT END:	17.0°	CLOUD COVER (oktas):	0/8	END TIME:	23:14
WIND (bft):	2/12	RAINFALL:	0	WEATHER:	Warm/Dry
Data Analysed Y/N:	Y	Additional information:			
(PLEASE ADD TRAGET NOTES TO MAP AND APPEND TO RECORDING FORM)					
TIME	STOPPING POINT/TARGET NOTE	SPECIES	NUMBER OF BATS	ACTIVITY (behaviour/ commuting/ direction/ foraging/ feeding/ feeding buzzes/ roost/ etc.	
21:35-21:40	D	-	-	No activity	
21:54-21:59	C				
21:54	C	Soprano pipistrelle	1	Commuting South	
22:02	C-D	Common pipistrelle	1	Brief call, heard not seen	

22:03	C-D	Soprano pipistrelle	1	Brief call, heard not seen
22:07-22:12	D	-	-	No activity
22:13-22:18	E			
22:13	E	Soprano pipistrelle	1	Brief call, heard not seen
22:23	D-C	Soprano pipistrelle	1	Heard not seen commuting
22:24-22:29	C			
22:24	C	Common pipistrelle	1	Heard not seen commuting
22:32	C-B	Soprano pipistrelle	1	Brief call, heard not seen
22:35	C-B	Common pipistrelle	1	Brief call, heard not seen
22:37	C-B	Long eared sp.	1	Brief quiet call, heard not seen
22:39	C-B	Common pipistrelle	1	Heard not seen foraging
22:40-22:45	B			
22:42-22:44	B	Common pipistrelle	1	Continuous foraging, heard not seen
22:47	B-A	Soprano pipistrelle	1	Heard not seen foraging
22:48	B-A	Common pipistrelle	1	Heard not seen commuting
22:49/50	B-A	Soprano pipistrelle	1	Heard not seen foraging
22:51	B-A	Soprano pipistrelle	1	Heard not seen commuting
22:52-22:57	A			
22:57	A	Common pipistrelle	1	Brief call, heard not seen
23:04-23:09	E	-	-	No activity
23:12-23:14	A	-	-	No activity

August 2022

BAT DETECTOR ACTIVITY SURVEY					
SURVEY LOCATION:	Welbourne Blue transect	SURVEYORS:	Colin Sutch, Lisa sharp	DATE:	10/08/2022
TEMP AT START:	25.0°	SUNSET:	20:34	START TIME:	20:34
TEMP AT END:	22.0°	CLOUD COVER (oktas):	0/8	END TIME:	22:34
WIND (bft):	2/12	RAINFALL:	0	WEATHER:	Still/warm/dry
Data Analysed Y/N:		Additional information:	Bat logger		
(PLEASE ADD TRAGET NOTES TO MAP AND APPEND TO RECORDING FORM)					
TIME	STOPPING POINT/TARGET NOTE	SPECIES	NUMBER OF BATS	ACTIVITY (behaviour/ commuting/ direction/ foraging/ feeding/ feeding buzzes/ roost/ etc.	
20:34-20:39	A	-	-	No activity	
20:48-20:53	E	-	-	No activity	
20:59-21:04	C				
21:02	C	Common pipistrelle	1	Brief call, heard not seen	
21:11-21:16	D	-	-	No activity	
21:23	D-C	Soprano pipistrelle	1	Heard not seen commuting	
21:24	D-C	Soprano pipistrelle	1	Foraging from East to West along track	
21:27-21:32	C				
21:27	C	Common pipistrelle	1	Brief call, heard not seen	
21:32	C	Common pipistrelle	2	Heard not seen foraging	
21:39	C-B	Common pipistrelle	1	Brief call, heard not seen	
21:44	C-B	Serotine	1	Heard not seen commuting	
21:44	C-B	Soprano pipistrelle	1	Foraging from West to East over field	
21:45-21:49	C-B	Common pipistrelle	1	Heard not seen foraging	
21:51-21:56	B	-	-	No activity	

21:56	B-A	Common pipistrelle	1	Brief call, heard not seen
22:13-22:18	A	-	-	No activity
22:22-22:26	B			
22:25	B	Common pipistrelle	1	Brief call, heard not seen

BAT DETECTOR ACTIVITY SURVEY					
SURVEY LOCATION:	Welborne Blue transect	SURVEYORS:	Colin Sutch, Rick Sharp	DATE:	11/08/2022
TEMP AT START:	18.0°	SUNRISE:	05:45	START TIME:	03:45
TEMP AT END:	16.0°	CLOUD COVER (oktas):	0/8	END TIME:	05:45
WIND (bft):	2/12	RAINFALL:	0	WEATHER:	
Data Analysed Y/N:		Additional information:			
(PLEASE ADD TRAGET NOTES TO MAP AND APPEND TO RECORDING FORM)					
TIME	STOPPING POINT/TARGET NOTE	SPECIES	NUMBER OF BATS	ACTIVITY (behaviour/ commuting/ direction/ foraging/ feeding/ feeding buzzes/ roost/ etc.	
03:44-03:48	A				
03:44	A	Common pipistrelle	1	Brief call, heard not seen	
04:00-04:05	B	-	-	No activity	
04:21	B-C	Common pipistrelle	1	Heard not seen commuting	
04:22-04:27	C				
04:22/23	C	Soprano pipistrelle	1	Heard not seen foraging	
04:35-04:39	D	-	-	No activity	
04:39	D-C	Soprano pipistrelle	1	Brief call, heard not seen	
04:48-04:53	C				
04:49	C	Common pipistrelle	1	Brief call, heard not seen	
04:51	C	Soprano pipistrelle	1	Foraging around point C	

04:59	C-E	Soprano pipistrelle	1	Commuting from South to North over field
05:01	C-E	Common pipistrelle	1	Foraging on West side of field
05:02	C-E	Noctule	1	Heard not seen commuting
05:03	C-E	Soprano pipistrelle	1	Commuting from West to East over field
05:05-05:11	E			
05:06	E	Common pipistrelle	1	Brief call, heard not seen
05:11	E	Soprano pipistrelle	1	Brief call, heard not seen
05:14-05:16	E-A	Soprano pipistrelle	1	Heard not seen foraging
05:19	E-A	Soprano pipistrelle	1	Brief call, heard not seen
05:23-05:27	A	-	-	No activity
05:30-05:35	B	-	-	No activity
05:38-05:43	A	-	-	No activity

September 2022

BAT DETECTOR ACTIVITY SURVEY					
SURVEY LOCATION:	Welborne Blue transect	SURVEYORS:	Lisa Sharp, Ewan Hitchcoe	DATE:	19/09/2022
TEMP AT START:	16.0°	SUNSET:	19:11	START TIME:	19:11
TEMP AT END:	15.0°	CLOUD COVER (oktas):	8/8	END TIME:	21:11
WIND (bft):	2-3/12	RAINFALL:	0	WEATHER:	Overcast/Dry
Data Analysed Y/N:	Y	Additional information:			
(PLEASE ADD TRAGET NOTES TO MAP AND APPEND TO RECORDING FORM)					
TIME	STOPPING POINT/TARGET NOTE	SPECIES	NUMBER OF BATS	ACTIVITY (behaviour/ commuting/ direction/ foraging/ feeding/ feeding buzzes/ roost/ etc.	
19:18	B-C	Soprano pipistrelle	1	Commuting, heard not seen	

19:23/24	B-C	Soprano pipistrelle	1	Commuting West to East
19:26	B-C	Soprano pipistrelle	1	Commuting West to East
19:29	B-C	Soprano pipistrelle	1	Heard not seen foraging
19:38-19:40	B-C	Soprano pipistrelle	1	Heard not seen foraging
19:40	C			
19:40	C	Common pipistrelle	1	Very brief call, heard not seen
19:45	C-D	Soprano pipistrelle	1	Brief call, heard not seen
19:48	C-D	Common pipistrelle	1	Brief call, heard not seen
19:49	C-D	Soprano pipistrelle	1	Commuting, heard not seen
19:52/53	C-D	Common pipistrelle	1	Heard not seen foraging
19:59-20:04	C-D	Common and Soprano pipistrelle	2	Heard not seen foraging (social calls)
20:05-20:10	D			
20:05-20:08	D	Serotine, Common and Soprano pipistrelle	3	Foraging, heard not seen (social calls)
20:08	D	Common pipistrelle and Myotis sp	2	Commuting, heard not seen
20:15	D-E	Common pipistrelle	1	Heard not seen foraging
20:17-20:22	E	-	-	No activity
20:26-20:29	E-A	Common pipistrelle	1	Brief calls, heard not seen
20:31-20:33	E-A	Common pipistrelle	1	Heard not seen foraging
20:41	E-A	Common pipistrelle	1	Brief call, heard not seen, (social calls)
20:44-20:49	A	-	-	No activity
20:53/54	A-B	Common pipistrelle	1	Heard not seen foraging
20:55/56	A-B	Common pipistrelle	2	Heard not seen foraging

20:57-21:02	B			
21:57/58	B	Common pipistrelle	4	Heard not seen foraging
20:59	B	Noctule	1	Very brief call, heard not seen
21:00-21:03	B	Common pipistrelle	1	Heard not seen foraging
21:02	B	Noctule	1	Very brief call, heard not seen

Green transect

April 2022

BAT DETECTOR ACTIVITY SURVEY					
SURVEY LOCATION:	Welbourne Green route	SURVEYORS:	Aimee Cokayne, Jay Van der Westhuizen	DATE:	20/04/2022
TEMP AT START:	13.0°	SUNSET:	20:08	START TIME:	20:08
TEMP AT END:	11.0°	CLOUD COVER (oktas):	6/8	END TIME:	22:08
WIND (bft):	1/12	RAINFALL:	0	WEATHER:	Mild/still
Data Analysed Y/N:	Y	Additional information:	EMT and IPAD		
(PLEASE ADD TRAGET NOTES TO MAP AND APPEND TO RECORDING FORM)					
TIME	STOPPING POINT/TARGET NOTE	SPECIES	NUMBER OF BATS	ACTIVITY (behaviour/ commuting/ direction/ foraging/ feeding/ feeding buzzes/ roost/ etc.	
20:08					
20:22-20:27	A				
20:26	A	Soprano pipistrelle	1	Commuting, heard not seen	
20:31	A-B	Common pipistrelle	1	Brief call, seen near Mill house	
20:42-20:47	B	-	-	No Activity	
20:48-20:49	B-C	Common pipistrelle	1	Heard not seen foraging, faint call	
20:50/51	B-C	Common pipistrelle	1	Heard not seen foraging	
20:51	B-C	Serotine	1	Foraging North to South along woodland fringe	
20:58	B-C	Serotine	1	Heard not seen foraging	

20:59-21:04	C			
21:03	C	Long eared sp	1	Heard not seen foraging
21:06	C-D	Common and Soprano pipistrelle	2	Heard not seen foraging
21:08	C-D	Soprano pipistrelle	1	Heard not seen foraging
21:15-21:20	D			
21:15	D	Serotine	1	Heard not seen foraging
21:22	D-E	Long eared sp	1	Heard not seen foraging
21:25-21:26	D-E	Common and Soprano pipistrelle	2	Heard not seen foraging and social calls
21:28-21:29	D-E	Common pipistrelle	1	Heard not seen foraging
21:29-21:33	D-E	Soprano pipistrelle	1	Heard not seen foraging and social calling
21:34	D-E		1	Heard not seen foraging
21:35-21:40	E			
21:35	E	Soprano pipistrelle	1	Foraging and social calling
21:37	E	Soprano pipistrelle	1	Heard not seen foraging
21:38	E	Common pipistrelle	1	Heard not seen foraging
21:40	E-F	Soprano pipistrelle	1	Heard not seen foraging
21:41-21:43	E-F	Soprano pipistrelle	1	Heard not seen foraging
21:43-21:49	F			
21:43-21:44	F	Serotine	1	Heard not seen foraging
21:44	F	Common pipistrelle	1	Heard not seen foraging
21:46	F	Serotine	1	Heard not seen foraging
21:49	F	Soprano pipistrelle	1	Heard not seen foraging
22:00	F-A	Common pipistrelle and Serotine	2	Heard not seen foraging

22:01	F-A	Myotis sp Common pipistrelle	2	Heard not seen foraging in the woodland
22:05	F-A	Common pipistrelle	1	Heard not seen foraging

May 2022

BAT DETECTOR ACTIVITY SURVEY					
SURVEY LOCATION:	Welbourne Green transect	SURVEYORS:	Aimee Cokayne, Jay van der Westhuizen	DATE:	19/05/2022
TEMP AT START:	14.0°	SUNSET:	20:55	START TIME:	20:55
TEMP AT END:	13.0°	CLOUD COVER (oktas):	6/8	END TIME:	22:55
WIND (bft):	1/12	RAINFALL:	0	WEATHER:	
Data Analysed Y/N:	Y	Additional information:	EMT and IPAD		
(PLEASE ADD TRAGET NOTES TO MAP AND APPEND TO RECORDING FORM)					
TIME	STOPPING POINT/TARGET NOTE	SPECIES	NUMBER OF BATS	ACTIVITY (behaviour/ commuting/ direction/ foraging/ feeding/ feeding buzzes/ roost/ etc.	
21:01-21:06	F	-	-	No activity	
21:06	F-E	Soprano pipistrelle	1	Brief call, heard not seen	
21:16	F-E	Common pipistrelle	1	Brief call, heard not seen	
21:18-21:23	E				
21:20	E	Soprano pipistrelle	1	Brief call, heard not seen	
21:27	E-D	Common and Soprano pipistrelle	2	Foraging near woodland and along the hedgerow	
21:28-21:29	E-D	Common and Soprano pipistrelle	2	Foraging near woodland and along the hedgerow	
21:30/31	E-D	Soprano pipistrelle	1	Heard not seen commuting	

21:33	E-D	Common pipistrelle	1	Heard not seen commuting
21:34	E-D	Soprano pipistrelle	1	Foraging along woodland fringe, heard not seen
21:34	E-D	Common pipistrelle	1	Foraging along woodland fringe, heard not seen
21:36/37	E-D	Common pipistrelle	1	Foraging along woodland fringe, heard not seen
21:40-21:48	D			
21:40/41	D	Serotine	1	Foraging from South to North along woodland fringe
21:43	D	Soprano pipistrelle	1	Heard not seen, foraging
21:43	D	Barbastelle	1	Heard not seen, foraging
21:46-21:48	D	Serotine	1	Foraging along woodland fringe, heard not seen
21:48	D-C	Common pipistrelle	1	Foraging along woodland fringe, heard not seen
21:50/51	D-C	Soprano pipistrelle	1	Heard not seen, foraging
21:52	D-C	Serotine	1	Heard not seen, foraging
21:53	D-C	Noctule	1	Heard not seen commuting
21:58-22:03	C			
21:58-22:00	C	Serotine	1	Heard not seen, foraging
22:05	C-B	Myotis sp	1	Heard not seen, foraging
22:05	C-B	Serotine	1	Heard not seen, foraging
22:17-22:22	B	-	-	No activity
22:26	B-A	Common pipistrelle	1	Foraging near farm house, heard not seen
22:27	B-A	Common pipistrelle	1	Foraging near farm buildings, heard not seen
22:29-22:31	B-A	Common pipistrelle	1	Foraging near Mill house on forest road, heard not seen
22:36-22:43	A			
22:36-22:43	A	Serotine	1	Foraging along woodland strip on field margin, heard not seen
22:49-22:51	A-F	Common pipistrelle	1	Foraging along Eastern hedgerow, heard not seen

June 2022

BAT DETECTOR ACTIVITY SURVEY					
SURVEY LOCATION:	Welborne Green route	SURVEYORS:	Aimee Cokayne, Jay van der Westhuizen	DATE:	20/06/2022
TEMP AT START:	16.0°	SUNSET:	21:22	START TIME:	21:22
TEMP AT END:	15.0°	CLOUD COVER (oktas):	1/8	END TIME:	23:22
WIND (bft):	1/12	RAINFALL:	0	WEATHER:	Warm/clear
Data Analysed Y/N:	Y	Additional information:	EMT and IPAD		
(PLEASE ADD TRAGET NOTES TO MAP AND APPEND TO RECORDING FORM)					
TIME	STOPPING POINT/TARGET NOTE	SPECIES	NUMBER OF BATS	ACTIVITY (behaviour/ commuting/ direction/ foraging/ feeding/ feeding buzzes/ roost/ etc.	
21:22-21:27	A	-	-	No activity	
21:51-21:53	A-B	Soprano pipistrelle	1	Foraging along treeline	
21:55-21:59	B	-	-	No activity	
22:00	B-C	Common pipistrelle	1	Heard not seen foraging	
22:08-22:13	C	-	-	No activity	
22:20	C-D	Common pipistrelle	1	Heard not seen foraging	
22:26-22:31	D				
22:26/28	D	Common pipistrelle	2	Heard not seen foraging	
22:29	D	Myotis sp	1	Heard not seen commuting	
22:30/31	D	Common pipistrelle	1	Heard not seen foraging	
22:37	D-E	Common pipistrelle	1	Heard not seen foraging	
22:38-22:39	D-E	Common pipistrelle	3	Foraging up and down woodland fringe	
22:40	D-E	Common pipistrelle	1	Heard not seen commuting	
22:42/43	D-E	Common and	2	Heard not seen foraging	

		Soprano pipistrelle		
22:43/44	D-E	Soprano pipistrelle	1	Heard not seen foraging
22:51-22:55	E			
22:52	E	Myotis sp	1	Brief call, heard not seen
22:54	E	Soprano pipistrelle	1	Heard not seen foraging
23:02-23:07	F			
23:02-23:07	F	Soprano pipistrelle	1	Heard not seen, continuous foraging (social calls)
23:10/11	F-A	Common and Soprano pipistrelle	1	Heard not seen foraging
23:12/13	F-A	Common pipistrelle	1	Heard not seen foraging
23:14	F-A	Soprano pipistrelle	1	Heard not seen foraging
23:14/15	F-A	Common pipistrelle	1	Foraging up and down track
23:15	F-A	Common and Soprano pipistrelle	2	Heard not seen foraging
23:16-23:17	F-A	Common pipistrelle	1	Heard not seen foraging

July 2022

BAT DETECTOR ACTIVITY SURVEY					
SURVEY LOCATION:	Welborne Green transect	SURVEYORS:	Aimee Cokayne, Jay van der Westhuizen	DATE:	14/07/2022
TEMP AT START:	21.0°	SUNSET:	21:14	START TIME:	21:14
TEMP AT END:	20.0°	CLOUD COVER (oktas):	1/8	END TIME:	23:14
WIND (bft):	1/12	RAINFALL:	0	WEATHER:	
Data Analysed Y/N:	Y	Additional information:	EMT, IPAD		
(PLEASE ADD TRAGET NOTES TO MAP AND APPEND TO RECORDING FORM)					

TIME	STOPPING POINT/TARGET NOTE	SPECIES	NUMBER OF BATS	ACTIVITY (behaviour/ commuting/ direction/ foraging/ feeding/ feeding buzzes/ roost/ etc.
21:23-21:28	F			
21:25-21:27	F	Soprano pipistrelle	1	Heard not seen, continuous foraging
21:32-21:37	E	-	-	No activity
21:46-21:49	D			
21:46	D	Soprano pipistrelle	1	Heard not seen foraging
22:01-22:06	C	-	-	No activity
22:13	C-B	Soprano pipistrelle	1	Heard not seen foraging
22:16-22:21	B			
22:22	B-A	Soprano pipistrelle	1	Heard not seen foraging
22:31-22:33	B-A	Common pipistrelle	1	Heard not seen, continuous foraging
22:34	B-A	Common pipistrelle	1	Foraging up and down the road
22:41-22:47	A			
22:45-22:47	A	Common pipistrelle	1	Heard not seen, continuous foraging
22:49-22:53	A-B	Common pipistrelle	1	Heard not seen, continuous foraging

August 2022

BAT DETECTOR ACTIVITY SURVEY					
SURVEY LOCATION:	Welborne Green transect	SURVEYORS:	Aimee Cokayne, Jay van der Westhuizen	DATE:	10/08/2022
TEMP AT START:	24.0°	SUNSET:	20:34	START TIME:	20:34
TEMP AT END:	22.0°	CLOUD COVER (oktas):	0/8	END TIME:	22:34
WIND (bft):	0/12	RAINFALL:	0	WEATHER:	Hot and still
Data Analysed Y/N:	Y	Additional information:	EMT and IPAD		
(PLEASE ADD TRAGET NOTES TO MAP AND APPEND TO RECORDING FORM)					

TIME	STOPPING POINT/TARGET NOTE	SPECIES	NUMBER OF BATS	ACTIVITY (behaviour/ commuting/ direction/ foraging/ feeding/ feeding buzzes/ roost/ etc.
20:45-20:50	A	-	-	No activity
21:02-21:07	B	-	-	No activity
21:16-21:21	C	-	-	
21:30	C-D	Soprano pipistrelle	1	Heard not seen foraging
21:33-21:38	D			
21:33	D	Serotine	1	Foraging around the field
21:40	D-E	Common pipistrelle	1	Heard not seen foraging
21:41	D-E	Serotine and Common pipistrelle	2	Serotine foraging around the field, Pipistrelle commuting heard not seen
21:51-21:56	E	-	-	No activity
21:59-22:04	F	-	-	No activity
22:11	F-A	Common pipistrelle	1	Heard not seen foraging
22:15-22:17	F-A	Common pipistrelle	1	Heard not seen continuous foraging
22:19	F-A	Common pipistrelle	1	Heard not seen foraging
22:20-22:21	F-A	Common pipistrelle	1	Heard not seen continuous foraging
22:21	F-A	Common pipistrelle	2	Heard not seen foraging
22:23	F-A	Serotine	1	Heard not seen foraging
22:23	F-A	Common pipistrelle	1	Heard not seen foraging
22:25	F-A	Common and Soprano pipistrelle	2	Heard not seen foraging
22:26	F-A	Common pipistrelle	1	Heard not seen foraging social calls)

BAT DETECTOR ACTIVITY SURVEY					
SURVEY LOCATION:	Welborne Green transect	SURVEYORS:	Aimee Cokayne, Jay van der Westhuizen	DATE:	11/08/2022
TEMP AT START:	19.0°	SUNRISE:	03:43	START TIME:	03:43
TEMP AT END:	17.0°	CLOUD COVER (oktas):	0/8	END TIME:	05:43
WIND (bft):	0/12	RAINFALL:	0	WEATHER:	Warm/clear
Data Analysed Y/N:	Y	Additional information:	EMT and IPAD		
(PLEASE ADD TRAGET NOTES TO MAP AND APPEND TO RECORDING FORM)					
TIME	STOPPING POINT/TARGET NOTE	SPECIES	NUMBER OF BATS	ACTIVITY (behaviour/ commuting/ direction/ foraging/ feeding/ feeding buzzes/ roost/ etc.	
03:43-03:48	A	-	-	No activity	
03:52-03:54	A-F	Common pipistrelle	1	Heard not seen foraging	
03:54/55	A-F	Common and Soprano pipistrelle	2	Heard not seen foraging	
03:56	A-F	Common pipistrelle	1	Brief call, heard not seen	
04:00	A-F	Common pipistrelle	1	Brief call, heard not seen	
04:04-04:09	F	-	-	No activity	
04:12	F-E	Common pipistrelle	1	Brief call, heard not seen	
04:16-04:21	E	-	-	No activity	
04:28	E-D	Common pipistrelle	1	Heard not seen foraging	
04:29	E-D	Common pipistrelle	1	Heard not seen foraging	
04:30/31	E-D	Common pipistrelle	1	Heard not seen continuous foraging	
04:34	E-D	Common pipistrelle	1	Heard not seen foraging	
04:36	E-D	Common pipistrelle	1	Heard not seen foraging	
04:38-04:44	D				

04:40	D	Soprano pipistrelle	1	Heard not seen foraging
04:43	D	Soprano pipistrelle	1	Foraging along woodland edge (social calls)
04:44	D	Common pipistrelle	1	Very brief quiet call, heard not seen
04:49-04:50	D-C	Common pipistrelle	1	Heard not seen foraging
04:55-05:00	C	-	-	No activity
05:11-05:16	B	-	-	No activity
05:23	B-A	Common pipistrelle	1	Heard not seen foraging
05:26/27	B-A	Common pipistrelle	1	Foraging along the road
05:32-05:37	A		-	No activity

September 2022

BAT DETECTOR ACTIVITY SURVEY					
SURVEY LOCATION:	Welborne Green transect	SURVEYORS:	Aimee Cokayne, Jay van der Westhuizen	DATE:	19/09/2022
TEMP AT START:	16.0°	SUNSET:	19:10	START TIME:	19:10
TEMP AT END:	16.0°	CLOUD COVER (oktas):	6/8	END TIME:	21:10
WIND (bft):	1/12	RAINFALL:		WEATHER:	Overcast/mild
Data Analysed Y/N:	Y	Additional information:	EMT and IPAD		
	(PLEASE ADD TRAGET NOTES TO MAP AND APPEND TO RECORDING FORM)				
TIME	STOPPING POINT/TARGET NOTE	SPECIES	NUMBER OF BATS	ACTIVITY (behaviour/ commuting/ direction/ foraging/ feeding/ feeding buzzes/ roost/ etc.	
19:25-19:30	A	-	-	No activity	
19:35	A-B	Common pipistrelle	1	Heard not seen foraging	
19:36/37	A-B	Soprano pipistrelle	1	Heard not seen foraging	
19:42-19:47	B	-	-	No activity	
19:57-20:02	C				
19:57	C	Common pipistrelle	1	Brief call, heard not seen	

20:05	C-D	Common pipistrelle	1	Heard not seen foraging
20:13	C-D	Common pipistrelle		Brief call, heard not seen
20:15-20:22	D			
20:14/15	D	Soprano pipistrelle	1	Heard not seen foraging (social calls)
20:15-20:18	D	Common pipistrelle	1	Heard not seen foraging
20:19-20:22	D	Common and Soprano pipistrelle	2	Heard not seen foraging and social calling
20:24	D-E	Soprano pipistrelle	1	Heard not seen foraging
20:26-20:27	D-E	Soprano pipistrelle	1	Heard not seen foraging
20:35-20:40	E			
20:36/37/38	E	Soprano pipistrelle	1	Faint social calls, in woodland
20:45-20:50	F			
20:45	F	Soprano pipistrelle	1	Very brief call, heard not seen
20:47-20:48	F	Pipistrelle sp	1	Faint social call, in woodland
20:55	F-A	Soprano pipistrelle	2	Heard not seen commuting (social calls)
20:58	F-A	Common pipistrelle	1	Heard not seen foraging
21:02/03	F-A	Common pipistrelle	1	Heard not seen foraging
21:03	F-A	Soprano pipistrelle	1	Heard not seen foraging
21:04	F-A	Common pipistrelle	1	Heard not seen foraging and social calling

Static monitoring results

Static 3 was located adjacent to the north-western boundary of the site, along the southern boundary of Raven's Wood. Seven species were recorded at static 3's location, including barbastelle, serotine, *Myotis* species, noctule, common pipistrelle, soprano pipistrelle and long-eared species. A total of 28 barbastelle passes were recorded in June with only one other registration for this species in July. Consistent activity was recorded for serotine throughout the monitoring period with a mean of 12.8 passes per month. Consistently low activity levels of *Myotis* species were recorded in all months except for

September, with a mean of 3.8 passes per month. Noctule was recorded in all months here, with a mean of 21.5 passes per month, although it is worth noting that activity peaked in June where 88 passes were recorded. Common pipistrelle was recorded throughout the monitoring period, with numbers peaking in June and July with high activity levels of 1887 and 1029 passes recorded during these months. A similar pattern in soprano pipistrelle activity was recorded with this species being recorded throughout the monitoring period, with numbers peaking in June and July with 352 and 278 passes in these months. Very low long-eared bat activity levels were recorded with a total of 5 passes recorded between June and September.

Scores for foraging areas (bold indicates the relevant criteria)

Species	Number of bats	Roosts/potential roosts nearby	Foraging habitat characteristics
Common (2)	Individual bats (5)	None (1)	Industrial or other site without established vegetation (1)
Uncommon(3)	-	Small number (3)	Suburban areas or intensive arable land (2)
Rarer (5)	Small number of bats (10)	Moderate number/Not known (4)	Isolated woodland patches, less intensive arable and/or small towns and villages (3)
-	-	Large number of roosts, or close to a SSSI for the species (5)	Larger or connected woodland blocks, mixed agriculture, and small villages/hamlets (4)
Rarest (20)	Large number of bats (20)	Close to or within a SAC for the species (20)	Mosaic of pasture, woodlands and wetland areas (5)
20	5	3	3
Total score			31

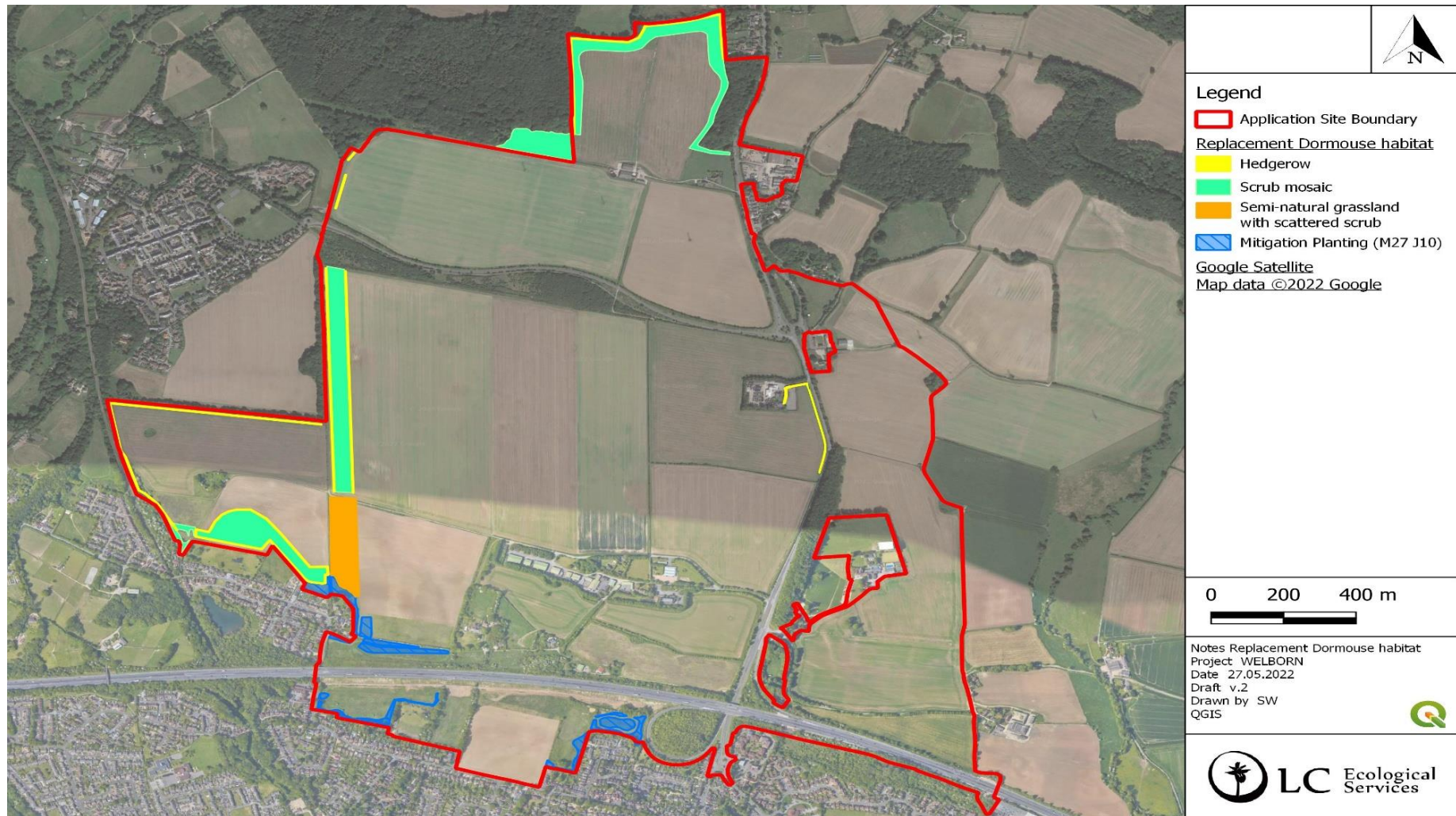
APPENDIX VII Reptile survey results

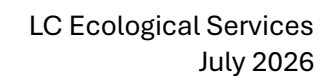


APPENDIX VIII Dormouse survey results



APPENDIX IX Site wide dormouse and reptile strategy





APPENDIX XI eDNA Results



Folio No: E13066
Report No: 1
Purchase Order: 042022W
Client: LINDSAY CARRINGTON
ECOLOGICAL SERVICES
Contact: Jenny Sutch

TECHNICAL REPORT

ANALYSIS OF ENVIRONMENTAL DNA IN POND WATER FOR THE DETECTION OF GREAT CRESTED NEWTS (TRITURUS CRISTATUS)

SUMMARY

When great crested newts (GCN), *Triturus cristatus*, inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analysing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

RESULTS

Date sample received at Laboratory: 28/04/2022
Date Reported: 08/05/2022
Matters Affecting Results: None

Lab Sample No.	Site Name	O/S Reference	SIC	DC	IC	Result	Positive Replicates
0991	Pond 4 Welbourne	SU 57086 07986	Pass	Pass	Pass	Negative	0
0995	Pond 2 Welbourne	SU 56695 09843	Pass	Pass	Pass	Negative	0
0997	Pond 1 Welbourne	SU 56695 09843	Pass	Pass	Pass	Negative	0
0998	Ditch 1 Welbourne	SU 56641 07972	Pass	Pass	Pass	Negative	0
0999	Ditch 2 Welbourne	SU 56643 07889	Pass	Pass	Pass	Negative	0

If you have any questions regarding results, please contact us: ForensicEcology@surescreen.com

Reported by: Chris Troth

Approved by: Gabriela Danickova

APPENDIX XII Site photographs including target notes

All photographs taken 13th March 2025.

Target note	Comments	image
T1	Area of unvegetated unsealed surface within the centre of phase 3b	
T2	A mix of hardstanding within the compound	
T3	Car park within the compound	
T4	Modified grassland within southwest of site	
T5	Small patch of scattered bramble scrub within the grassland	

T6	Defunct hedgerow along northern boundary	
T7	Disturbed margin on north of hedgerow	
T8	Disturbed margin on south of hedgerow	
T9	Sparsely vegetated urban land to the east of the site	