



## Updated PEA & Phase II Bat Survey

Oak Lodge Plot 4, Bursledon

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**Client:**  
Capital Homes

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2<sup>nd</sup> June, 2023

RE: Updated Ecological Survey & Bat Survey at 'Oak Lodge, Plot 4, Bursledon'

### **Brief / Aim**

Ecosupport Ltd. have been commissioned by Capital Homes to provide an updating preliminary ecological appraisal (PEA) at Plot 4 of Oak Lodge, Bursledon to inform the proposed development.

The entire Oak Lodge site already has planning permission (reference F/20/87926 - informed by a previous ecology report completed by Ecosupport Ltd. in July 2020). The garage building at Plot 4 of the development was previously approved for conversion. However, the proposed design has been changed and therefore a new planning application is being submitted for this building. As the previous ecology survey data is out of date, an updating PEA was carried out on the building only, with all previously approved mitigation, compensation and enhancements remaining for the rest of the site. The previously approved design and the proposed layout can be seen in **Appendices 1 & 2**.

The objectives of the PEA survey were as follows:

- Assess the ecological value of the site;
- Identify any signs of protected species and potential features that may support them;
- Make recommendations for any further surveys or necessary ecological avoidance, mitigation and compensation measures.

### **Baseline Data (From previous ecological report) & Approved Mitigation/Enhancements**

The following information is based on the findings of the previous survey (Ecosupport Ltd, 2020), which encompasses the entire Oak Lodge site (of which Plot 4 is part of). The relevant local policy has been updated since the previous report, which can be found in **Appendix 3**.

### **Designated Sites**

The following statutory designated sites lie within 1km of the site: Upper Hamble Estuary and Woods SSSI, Solent & Southampton Water SPA & Ramsar, Solent Maritime SAC, Manor Farm LNR, Lincegrove and Hackett's Marshes SSSI and Solent and Dorset Coast SPA. None are in the immediate

vicinity of the site. Payment into the Solent Recreation Mitigation Strategy was included as mitigation.

There are 11 non-statutory Sites of Interest for Nature Conservation (SINC) within 1km of the site, with only EA0148 identified as having potential impacts. Buffer strips with planting were proposed to protect and enhance the adjacent SINC on the northern boundary.

## **Habitats**

The following habitats were identified within the whole Oak Lodge site: Poor semi-improved grassland, amenity grassland, ornamentals, scrub, trees/hedges, hardstanding and buildings. Protection of retained hedgerows and trees was recommended during construction works.

## **Protected Species**

- Bats – The Oak Lodge garage outbuilding (the subject of this report) was identified as having low potential for supporting roosting bats. A subsequent bat emergence survey in June 2020, which did not identify any roosting bats in this building. All other buildings within the site were negligible potential. Activity bat surveys were also carried out, which classified the site as district/local value for bats. Mitigation recommended included sensitive lighting, buffer strips along boundaries with dark corridors and soft-felling of a tree with low potential.
- Badgers – No evidence of Badgers were noted but the site was considered to have low potential for foraging and commuting Badgers.
- Birds – The site was considered to have low to moderate potential for nesting birds within mature trees and ornamental shrubs. Vegetation removal was recommended to be carried out outside of nesting season or preceded by a nesting bird survey.
- Dormice – The site was considered to have negligible potential for dormice.
- GCN – The site was considered to have negligible potential for GCN due to lack of nearby ponds.
- Reptiles – Phase II reptile surveys were carried out within the site in 2018 which identified an absence of reptiles.

Further enhancements were included within the previous ecology survey (Ecosupport Ltd.) including:

- Four swift bricks and one bat brick to be integrated into buildings
- Three bird boxes (Schwegler 1B, 2H and 2M) to be erected on retained trees
- Three bat boxes (Schwegler 2F, 2FN and 1FS) to be erected on retained trees
- Gaps in garden fencing for hedgehogs
- Native planting including wildflower lawn mix within gardens and amenity grassland and native tree and shrub planting along boundaries
- Two log piles within 15m SINC buffer

## Survey Methodology

An assessment was made of Plot 4 within Oak Lodge to update the findings of the previous report. The field work was carried out by Dean Swensson, Principal Ecologist with Ecosupport Ltd. with 24+ years ecological consultancy experience, on the 30<sup>th</sup> May 2023. The site area was reassessed for its habitats, potential to support protected species and potential impacts of the updated site plans.

Badgers - The site was thoroughly searched for evidence of use by Badgers, with the specific aim of identifying the presence and location of any setts. In accordance with the *Badgers and Development: A Guide to Best Practice and Licensing* (Natural England, 2011) guidance, the survey accounted for a 30m from the site's boundary (observed where possible i.e. does not conflict with private dwellings). Evidence of Badgers could include latrines, dung pits, feeding remains and foraging evidence, trails and setts.

Bat Preliminary Roost Assessment - In addition to the updating habitat survey, a preliminary roost assessment of the buildings on site was also undertaken at the time of the walkover. This assessment was undertaken by Dean Swensson during the site walkover (NE class level 2 bat licence holder 2015-13211-CLS-CLS). This followed BCT (Collins (ed) 2016) best practice survey guidelines searching for any Potential Roost Features (PRFs) / evidence of bat occupation and assigning a roost potential assessment as outlined in **Table 1** below.

**Table 1.** Guidelines for assessing the potential suitability of a built structures for roosting bats (reproduced from BCT (Collins (ed) 2016)

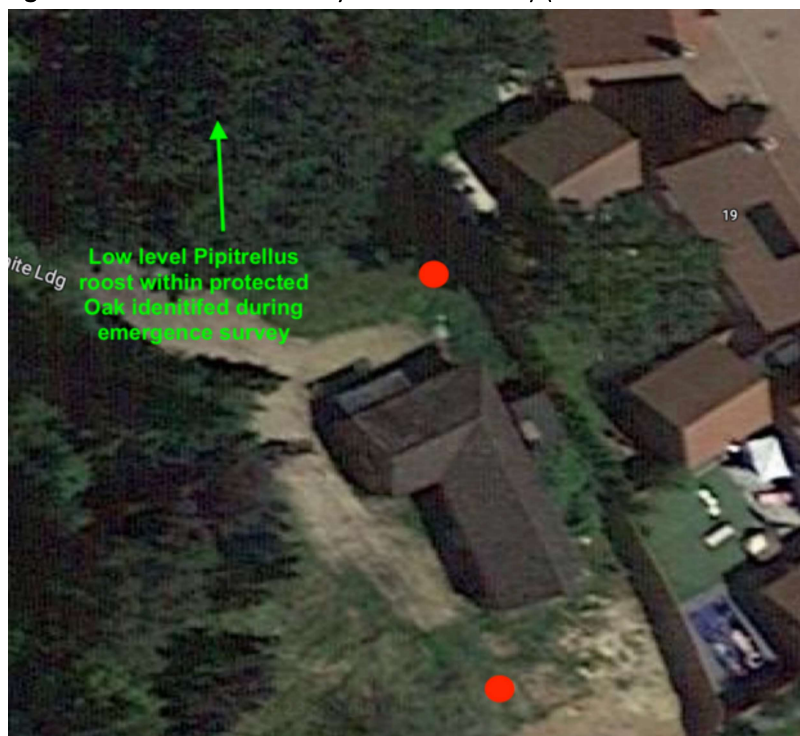
| Suitability | Description of Roosting Habitats                                                                                                                                                                                                                                                                                                                                                                   |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Negligible  | Negligible habitat features on site are likely to be used by roosting bats                                                                                                                                                                                                                                                                                                                         |
| Low         | A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions <sup>1</sup> and/or suitable surrounding habitat to be used on a regular basis or by a large number of bats (i.e. unlikely to be suitable for maternity or hibernation). |
| Moderate    | A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).     |
| High        | A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.                                                                                                                                    |

### Phase II bat emergence survey

One Phase II bat survey was undertaken on the building. The survey was led by Dean Swensson with assistance from Karen Symons. The approximate positions of the surveyors can be found in **Fig 1**. Heterodyne (Bat Box Duet and Elkon Batscanner) and full spectrum (Elekon Batlogger) detectors were used for identifying species calls. The dusk emergence survey began approximately 15 minutes prior to sunset and continued until approximately an hour and 30 minutes after. Survey sheets were used to record the following information:

- Time of call registration
- Species (if possible to identify using heterodyne detector)
- Location / activity
- Direction of flight (if seen)

**Figure 1.** Location of bat surveyors for the survey (and location of roost within nearby tree)



It was not considered there were any limitations to any aspects of the survey, which all areas of the site accessible and the survey carried out at a suitable time of year.

### Results of Updated Site Assessment

The updating survey found the habitats surrounding the building to be in a similar condition to the previous survey. The building is a single-storey red brick building in an L-shape. The roof is constructed of concrete tiles and there is a soffit in good condition. The building and roof tiles appeared to be in good shape and no PRFs were identified. However, some moss cover was noted on the roof tiles.

Internally, the loft space was underlined with bitumen felt, which was in good condition (**Fig 2**). No evidence of bats, PRFs, or potential entrance points were identified.

The building was not considered to have any roost features and was classified as ***negligible potential***. However, due to its previous low potential classification and existence of moss on the roof tiles (which may be covering PRFs), a precautionary Phase II emergence survey was carried out as detailed below.

**Figure 2.** Photo of internal loft space showing intact underlining



### **Phase II Emergence Survey**

A single precautionary bat survey was undertaken on the outbuilding. The results of the surveys are provided in **Tables 2 & 3** below. No bats were identified roosting within the building, although a low level Common Pipistrelle (*Pipistrellus pipistrellus*) roost was identified within an Oak tree to the north, the location of which is shown in in **Fig 1**.

**Table 2.** Relevant information on survey conditions recorded.

| Survey | Date       | Temp (°C) | Cloud Cover (%) | Wind (Beaufort scale) | Sunset/sunrise Time | Start Time | Finish Time |
|--------|------------|-----------|-----------------|-----------------------|---------------------|------------|-------------|
| 1      | 30/05/2023 | 14-11     | 80              | 2-3 NE                | 21:02               | 20:40      | 22:32       |

**Table 3.** Results from the bat survey on the building (no emergences recorded)

| General Bat Activity on Site                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|
| Species                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | First Pass | Last Pass |
| Common Pipistrelle                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 21:15      | 21:46     |
| Soprano Pipistrelle                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 21:20      | 21:46     |
| <p>Activity during this survey was considered to be low with individual bats noted briefly foraging and commuting across the site. Species diversity was low with only two species recorded throughout the survey.</p> <p>The first registration was from a Common Pipistrelle (<i>Pipistrellus pipistrellus</i>), which flew south to north overhead the new estate at 21:15. Two Common Pipistrelle bats emerged from the Oak tree to the north of the building at 21:16 and 21:17. A further three Common Pipistrelle bats were noted as heard not seen (with some foraging activity) during the survey, with the last pass recorded at 21:46.</p> <p>The second species recorded was a Soprano Pipistrelle (<i>Pipistrellus pygmaeus</i>), recorded as a potential (unconfirmed) emergence from the Oak tree to the north at 21:20. A further two Soprano Pipistrelle registrations were recorded during the survey at 21:43 and finally at 21:46, foraging near the Oak tree.</p> <p>No further activity was recorded and no emergences from the outbuilding were recorded.</p> |            |           |

### **Updated Assessment & Recommendations**

Overall, the assessment of the site is considered to be similar to what has been assessed previously, with no habitats of significant ecological value recorded within Plot 4.

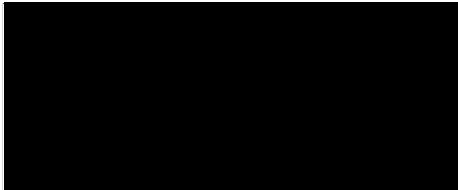
Since the proposed development is of a very similar scale to that which is already approved under granted planning permission F/20/87926, it is recommended that all mitigation, compensation and enhancements included in the previous ecology report (Ecosupport Ltd, 2020) are carried out within the entire site. Any enhancements that were previously planned in Plot 4 (such as integrated bat or bird boxes) will be integrated into the site to meet the required numbers and specifications of enhancements for site F/20/87926.

It is not considered that any additional planning mitigation or enhancements are required beyond what was previously recommended.

## **Conclusion**

Overall, the conditions of the site are considered to be similar to the previous ecology report. A precautionary updating bat emergence survey was carried out, which confirmed there are no roosting bats within the building. Since the proposed plans are of a similar scale as the previously approved layout for Plot 4 of Oak Lodge, Bursledon, it is considered that the ecological mitigation, compensation and enhancement measures within the previous approved report are relevant and no further mitigation or enhancement measures have been recommended.

Yours sincerely,



Darrelle Moffat  
Project Ecologist

## References

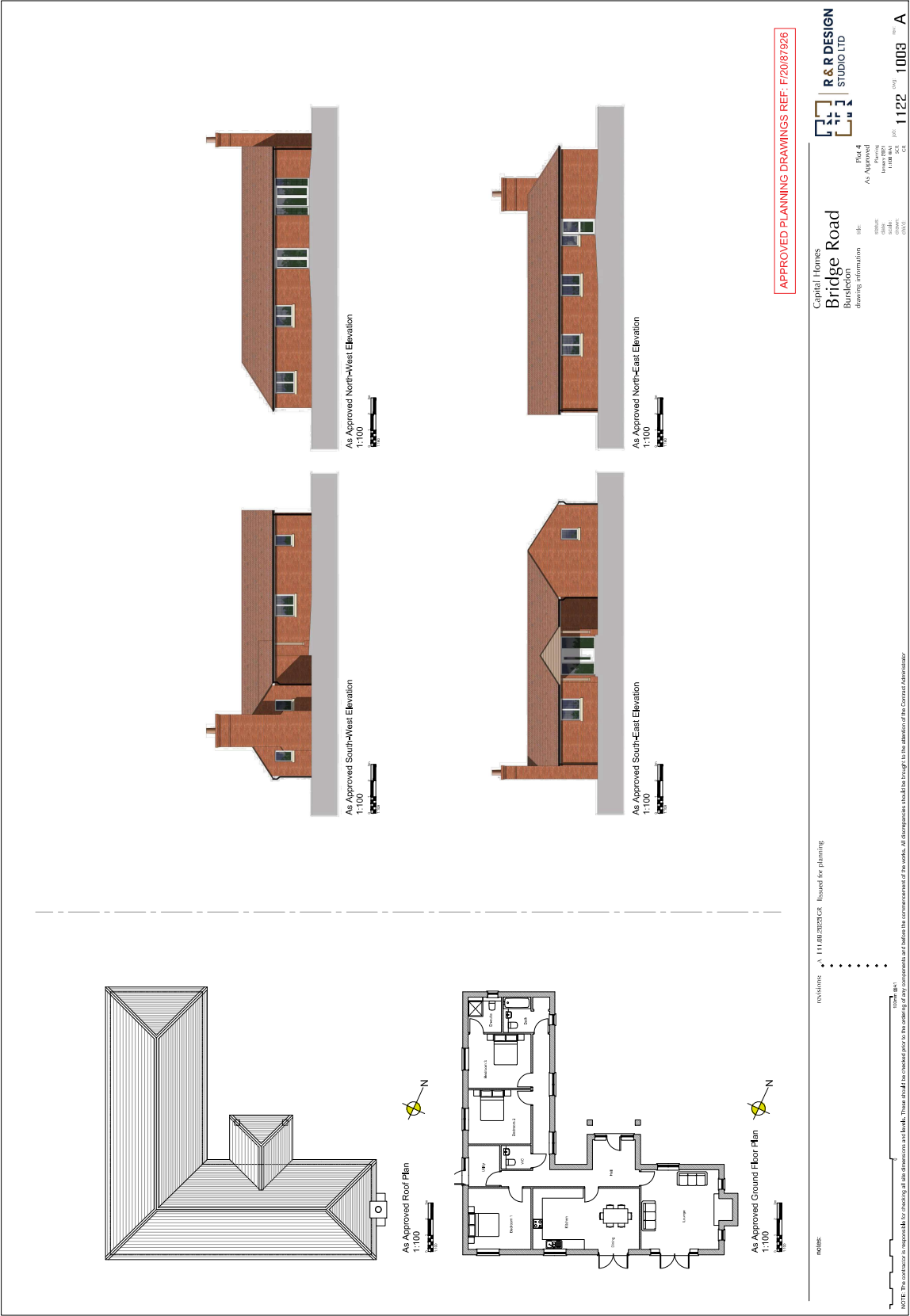
CIEEM. (2018). *Guidelines for Ecological Assessment in the United Kingdom*. Institute of Ecology and Environmental Management, Winchester.

Collins (ed) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines 3<sup>rd</sup> Edition*. The Bat Conservation Trust, London.

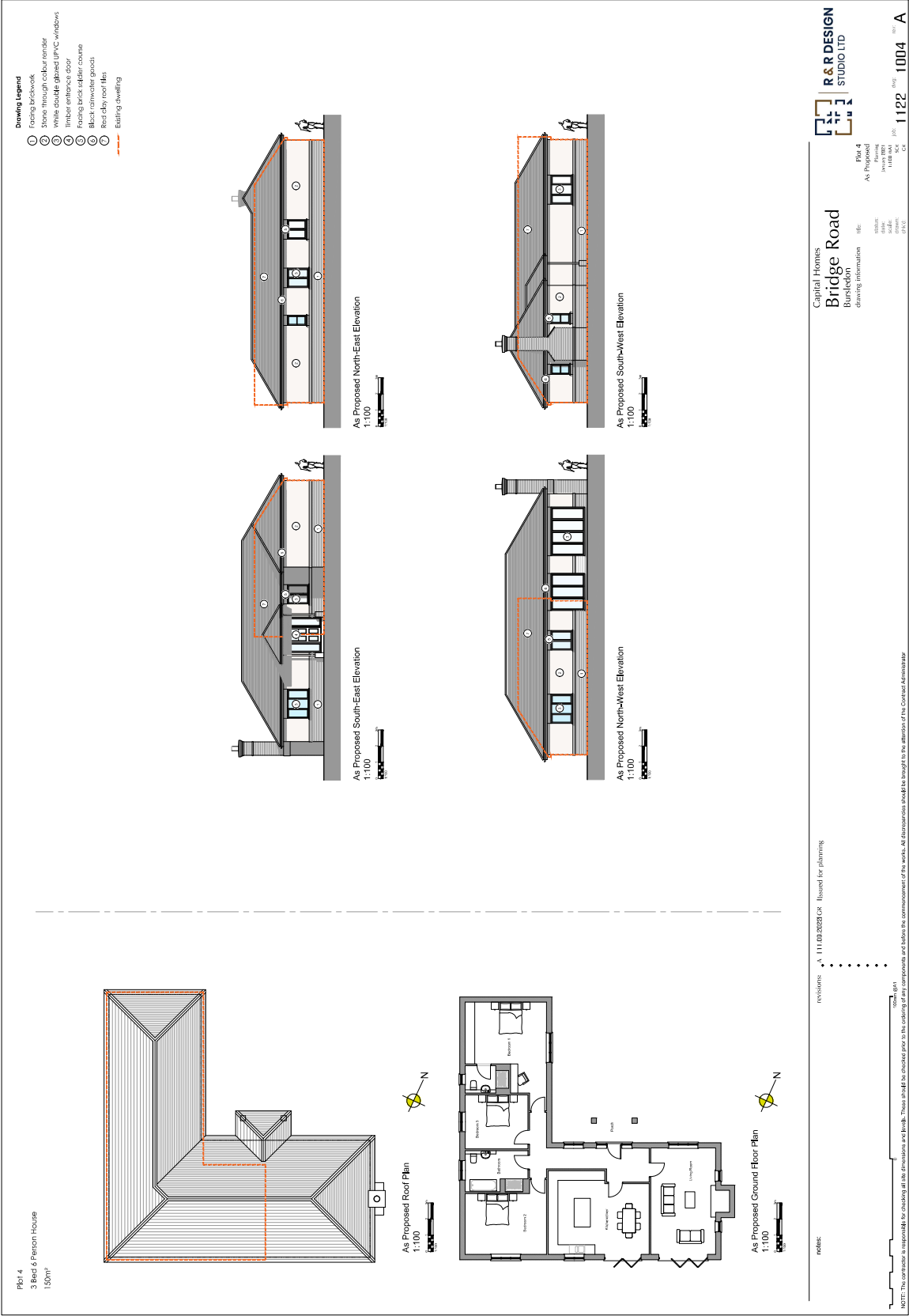
Eastleigh Borough Council (2022). *Eastleigh Borough Local Plan (2016-2036)*. Adopted April 2022. Accessed at: <https://www.eastleigh.gov.uk/media/11806/to-be-published-final-local-plan-april-2022-v4.pdf>

Ecosupport Ltd (2020). *Ecology Report. Oak Lodge, Bursledon*. Issued 23<sup>rd</sup> July 2020.

Appendix 1. Approved site layout of Plot 4 building



Appendix 2. Proposed Site Layout of Plot 4 building



### **Appendix 3 – Eastleigh Borough Local Plan (summary of relevant local policy)**

The Eastleigh Borough Local Plan 2016 – 2036 has a number of policies relating to ecology with the relevant ones listed below.

#### ***‘General Approach***

*1. The Council will work with statutory and voluntary agencies and developers, and will determine planning applications, to:*

*a. protect, conserve and enhance all:*

*i. international, national and local nature conservation designations;*

*and*

*ii. networks of natural habitats and features, including the Local Ecological Network, Priority Biodiversity Areas and Priority Biodiversity Links, watercourses, wetland complexes, woodland trees, and trees and hedgerows important to biodiversity and local character; and facilitate their adaptation to climate change wherever possible;*

*b. assist in achieving national, county and local biodiversity targets as set out in Biodiversity Action Plans (BAPs);*

*c. seek a net gain of biodiversity on all development sites (including sites for redevelopment) through the protection, enhancement and connection of existing and provision of new habitats and features of nature conservation interest compatible with the native biodiversity characteristics of the Borough, having regard to local geodiversity and soils; and*

*d. contribute to major elements of the PfSH Green Infrastructure Strategy and other strategies for the provision and enhancement of multifunctional green infrastructure including green routes, ecological networks and biodiversity enhancements (see strategic policy S9).*

#### ***International Designations***

*2. Development which is likely (either individually or in combination with other developments) to adversely affect the integrity of an international or European nature conservation site will not be permitted subject only to imperative reasons of overriding public interest and securing any necessary compensatory measures in the absence of alternative solutions. A ‘project level’ Habitat Regulations Assessment will be required where there are likely significant effects or uncertainty. Any mitigation measures required to ensure no adverse impact must be implemented at the appropriate time.*

*3. The Council will work with PfSH, Natural England, the Environment Agency and other wildlife organisations to develop and implement with developers a strategic approach to the protection and enhancement of international and European sites from the direct and indirect effects of development. Within Eastleigh Borough this will include:*

*a. implementing:*

- i. the Solent Recreation Mitigation Strategy (requiring contributions from residential developments within 5.6 kilometres of the Solent Special Protection Area to the Strategy); and*
- ii. the interim and any future New Forest Recreation Mitigation Strategy if required; or alternative agreed site specific measures to address recreational disturbance;*
- b. preserving the water quality and flows within the Itchen and Hamble, Southampton Water and Solent;*
- c. protecting the River Itchen SAC, in particular the maintenance and where appropriate restoration of habitats and qualifying species to favourable conservation status (as defined by article 1 of the Habitats Directive); and*
- d. seek contributions towards measures set out in the Southern Damselfly Conservation Strategy (or other strategy) specifically to deliver biodiversity net gain.*

#### **National and Local Designations**

- 4. Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on a Site of Special Scientific Interest (SSSI), Site of Importance for Nature Conservation (SINC) or Local Nature Reserve (LNR) as shown on the policies map (or on a more recent plan provided by the Hampshire Biodiversity Information Centre) unless it can be demonstrated that:*
- a. there are no alternative solutions;*
  - b. the adverse effects are unavoidable;*
  - c. measures are taken to mitigate or, as a last resort, compensate for the adverse effects;*
  - d. there is an overall biodiversity net gain; and*
  - e. if there are any residual adverse effects which cannot be avoided, mitigated or compensated, the benefits of the development must clearly outweigh the adverse effects on the nature conservation value of the site and any broader impacts on national and local designations.*

#### **Priority habitats, protected and priority species and the local ecological network**

- 5. Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on priority*
- habitats, protected or priority species, or on the local ecological network unless it can be demonstrated that:*
- a. there are no alternative solutions;*
  - b. the adverse effects are unavoidable;*
  - c. measures are taken to mitigate or, as a last resort, compensate for the adverse effects;*
  - d. there is an overall biodiversity net gain; and*

*e. if there are any residual adverse effects, the benefits of the development clearly outweigh the adverse effects on priority habitats, priority and protected species, and the local ecological network.*

### ***Irreplaceable habitats***

*6. Development will not be permitted if it results in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees), unless there are wholly exceptional reasons and a suitable compensation strategy exists.*

### ***Buffers***

*7. Buffers free from development will be provided to designated sites to avoid/mitigate impacts, including recreational impact and impacts on edge habitats, and to maintain dark skies.*

### ***Surveys***

*8. Development will not be permitted unless it can be demonstrated that:*

*a. there have been thorough habitat and species surveys;*

*b. the great crested newt strategic survey and strategy have been considered in all developments within 500m of a great crested newt pond; and*

*c. the strategic bat trapping survey has been considered in all developments within the locality of a woodland or connected habitat networks.'*