

1-3 FERDINAND PLACE, LONDON

ECOLOGICAL IMPACT ASSESSMENT

Final Document

May 2020

Preliminary Ecological Appraisals • Protected Species Surveys and Licensing • NVC • EcIA • HRA • Management Plans Habitats • Badger • Bats • Hazel Dormouse • Birds • Reptiles • Amphibians • Invertebrates • Riparian and Aquatic Species

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ECOSA Quality Assurance Record

This report has been produced in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Report Writing 2017 (CIEEM, 2017). The Ecological Impact Assessment and report has been prepared in line with the CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2018) and survey work has been undertaken in line with references within CIEEM's Source of Survey Guidance (CIEEM, 2017).

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1-3 FERDINAND PLACE, LONDON

ECOLOGICAL IMPACT ASSESSMENT

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Appendix 6 Appraisal Criteria for Bats

EXECUTIVE SUMMARY

Ecological Survey and Assessment Ltd (ECOSA) have been appointed by Savills, on behalf of their client Luxgrove Capital Partners, to undertake an Ecological Impact Assessment to support a planning application for the redevelopment of 1-3 Ferdinand Place, London. The site is located in Camden, London and comprises two semi-detached residential buildings. The proposals entail the demolition of the existing buildings on site and the erection of a four-storey building comprising office space and residential flats.

The main findings of the Ecological Impact Assessment are:

- The site entirely comprises a building; no other habitats are present. During the survey, a starling nest was recorded within the building. A roost survey for bats recorded a likely absence of roosting bats within the building.
- Demolishing the building has the potential to result in the killing and injuring of breeding birds and lead the permanent loss of suitable nesting habitat.
 Demolition works should therefore be carried out outside of the main nesting bird season (March to August inclusive).
- Bird boxes will be erected on the exterior of the building to compensate for the loss of suitable nesting habitat. As a form of enhancement, bat boxes will be integrated into the newly constructed building.
- Given the impacts identified, the mitigation, compensation and enhancement measures proposed, it is considered that the proposals accord with all relevant local and national planning policy.
- If the planning application boundary changes or the proposals for the site alter, a re-assessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey work may be required, particularly if development does not commence within 18 months of the date of the most recent relevant survey.

1.0 INTRODUCTION

1.1 Background

Ecological Survey & Assessment Limited (ECOSA) have been appointed by Savills on behalf of their client Luxgrove Capital Partners to undertake an Ecological Impact Assessment to support a planning application for the redevelopment of 1-3 Ferdinand Place, London, NW1 8EE (hereafter referred to as the site).

Previously, the site was part of a wider development site which was granted planning permission in 2016 (Ref: 2016/2457/P). Since the permission was granted the previous owners decided not to build out and have subsequently sold 1-3 Ferdinand Place to release funds. Planning permission with alterations to the previously granted permission is currently being sought for the site.

A previous Preliminary Ecological Appraisal of the wider development site was undertaken by Greengage in 2016, which has been referred to where relevant (Greengage, 2016).

1.2 The Site

The site is located in north London, between Camden Town and Chalk Farm, centred on National Grid Reference (NGR) TQ 2848 8435 (**Map 1**).

The site comprises an old funeral parlour with a part two-storey, part one-storey building to the east, and a garage and two stores to the west. The site is bounded by Ferdinand Place to the south and east, and residential buildings to the north and west. Several mature trees positioned along Ferdinand Place are present immediately adjacent to the northern site boundary.

The wider area is highly built up and urban in character and comprises a mix of retail centres, residential development roads and supermarkets. A railway line is located approximately 120 metres south of the site and Camden Market is located 280 metres south east of the site. The only green space in the surrounds is associated with gardens of residential areas and roadside vegetation.

1.3 Aims and Scope of Report

The information within this report is based on a field survey and desktop study and relevant species-specific surveys carried out between February and May 2020. The report describes the habitats and species (hereafter referred to as ecological features) within the site's Zone of Influence (Paragraph 3.2), and provides a detailed assessment of potential ecological effects of the proposed development of the site. It identifies the

need for any measures to avoid, mitigate or compensate for significant adverse effects¹ ecological features and outlines enhancements to the site's ecology to be implemented as part of the development. The objectives of the assessment are:

- To provide baseline information on ecological features within the site's Zone of Influence and determine the importance of these features;
- To assess, characterise and quantify the effects on ecological features, including cumulative effects, and identify significant effects in the absence of any mitigation;
- To set out measures to avoid, mitigate and compensate for significant ecological effects in accordance with the 'mitigation hierarchy'²;
- To provide an assessment of the significance of any residual effects;
- To outline opportunities for enhancement in order to achieve a net gain for biodiversity; and
- To set out the requirements for any post-construction monitoring.

1.4 Site Proposals

The proposals for the site entail the demolition of the existing building and the erection of a four storey building plus roof level accommodation and roof terrace comprised of office use (Class B1(a)) at ground floor level and 9 self-contained residential units (Class C3) on the upper floors with associated plant, cycle parking and refuse storage.

The appraisal made reference to a proposals plans by Coveburgess Architects dated 6th May 2020 (Drawing No's. 3262-CB-A-DR-1010 to 3262-CB-A-DR-1015, Revision P1) (**Appendix 1**).

Planning permission is being sought during 2020 with redevelopment works proposed to commence soon after permission has been granted.

¹ For the purposes of this assessment a 'significant' adverse effect is one which will have an adverse effect on the ecological feature at the site level or higher.

² In accordance with CIEEM Ecological Impact Assessment guidance (CIEEM, 2018) a sequential process is adopted to address impacts on features of ecological interest, with 'Avoidance' prioritised at the top of the hierarchy and Compensation/Enhancement' at the bottom. This is often referred to as the 'mitigation hierarchy'.

2.0 PLANNING POLICY CONTEXT

2.1 Introduction

This section summarises the planning policy in relation to ecology and biodiversity within the London Borough of Camden administrative area. This information is then used to assess the compliance of the scheme in relation to relevant planning policy and where necessary make recommendations for mitigation, compensation and enhancements (see Section 5.0).

2.2 National Policy

The National Planning Policy Framework (NPPF) sets out the government's requirements for the planning system in England. The original document was published in 2012 with a revised NPPF published in February 2019. A number of sections of the NPPF are relevant when taking into account development proposals and the environment. As set out within Paragraph 11 of the NPPF "*Plans and decisions should apply a presumption in favour of sustainable development*". However, Paragraph 177 goes on to state that "*The presumption in favour of sustainable development*". However, Paragraph 177 goes on to state that "*The presumption in favour of sustainable development*" does not apply where the plan or project is likely 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.".

The NPPF sets out that development proposals should not only minimise the impacts on biodiversity but also to provide enhancement. Paragraph 170 states that the planning system should contribute to and enhance the natural environment by "...minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures...".

A number of principles are set out in Paragraph 175, including that where harm cannot be adequately avoided then it should be mitigated for, or as a last resort, compensated for. Where impacts occur on nationally designated sites, the benefits must clearly outweigh any adverse impact and incorporating biodiversity in and around developments should be encouraged. Specific reference is also made to the protection of irreplaceable habitats³, including ancient woodland⁴. Where loss to irreplaceable habitats occurs planning permission would normally be refused unless there are wholly exceptional reasons and an adequate compensation strategy is in place. Paragraph

³ The NPPF defines irreplaceable habitats as "Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen."

⁴ Natural England defines ancient woodland as "An area that has been wooded continuously since at least 1600 AD. It includes ancient semi-natural woodland and plantations on ancient woodland sites (PAWS)."

175 also states "development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity". Protection of sites proposed as SPAs, SACs and Ramsar sites or acting as compensation for SPAs, SACs and Ramsar sites, should receive the same protection as habitat sites.

In addition to the NPPF, Circular 06/05 provides guidance on the application of the law relating to planning and nature conservation as it applies in England. Paragraph 98 states "the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat". Paragraph 99 states "it is essential that the presence or otherwise of a protected species, and the extent that they may be affected by the Proposed Project Development, is established before planning permission is granted".

2.3 Local Policy

Local planning policy within the London Borough of Camden is provided by the policies within the Camden Local Plan, adopted on 3rd July 2017. One policy is of direct relevance to ecology:

Policy A3 (Biodiversity) '*The Council will protect and enhance sites of nature conservation and biodiversity.*' This policy refers to:

- The designation and protection of nature conservation sites and the safeguarding of protected and priority habitats and species;
- Only granting permission for development if it does not adversely affect designated sites or priority habitats or species;
- The protection of other features with nature conservation value, including gardens, wherever possible;
- Assessing developments against their ability to realise benefits for biodiversity proportionate to the scale of development;
- Securing improvements to green corridors, particularly where a development scheme is adjacent to an existing corridor;
- Seeking to improve opportunities to experience nature, in particular where such opportunities are lacking;

- Requiring the demolition and construction phase of development, to avoid disturbance to habitats and species and ecologically sensitive areas, and the spread of invasive species; and
- Securing management plans, where appropriate, to ensure that nature conservation objectives are met.

In addition, several points of policy A3 refer specifically to the protection and securing of additional trees and vegetation:

 Resist the loss of trees and vegetation of significant ecological value, satisfactorily protecting trees and vegetation during development, provide replacement trees or vegetation where loss has been justified, and incorporate additional trees and vegetation where possible.

3.0 METHODS

3.1 Introduction

This section details the methods employed during the Ecological Impact Assessment. Any significant limitations to the assessment are also considered.

3.2 Zone of Influence

To define the total extent of the study area for this assessment, the proposed scheme was reviewed to establish the spatial scale at which ecological features could be affected⁵. The appropriate survey radii for the various elements of the assessment (i.e. desktop study, field survey and species-specific surveys) have been defined in the relevant sections below. These distances are determined based on the professional judgement of the ecologist leading the appraisal, taking into account the characteristics of the site subject to assessment, its surroundings, and the nature of the proposals.

3.3 Scoping

Protected species considered within the Ecological Impact Assessment are those species/species groups considered likely to be encountered given the geographical location and context of the site. As the impacts of the proposed works are limited to within the footprint of the on-site buildings only species likely to occur within buildings have been considered within this appraisal. Where the site was found to be suitable to support these species/species groups, and adverse effects cannot be avoided from the outset, further species-specific surveys are undertaken. These are discussed within the results section (Section 4.0) of the current report. Where such a species is unlikely to be present on site a justification for likely absence is provided. Species considered likely absent from the site are not then considered in the assessment of ecological effects and mitigation/compensation measures section (Section 5.0) of this report.

3.4 Desk Study

A full biological record centre desktop study was not undertaken as part of this assessment. This was not considered necessary given the limited scale of impacts and the nature of on-site and surrounding habitats.

3.4.1 Biological Records Centre

Greenspace Information for Greater London (GiGL) was consulted on 17th February 2020 for the following data:

⁵ The Zone of Influence (ZoI), as defined by CIEEM, is the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities (CIEEM, 2018).

- Records of non-statutory designated sites (Sites of Importance for Nature Conservation (SINCs)) within 500 metres of the site boundary. See Appendix 2 for details; and
- Records of legally protected and notable species (flora and fauna) within 500 metres of the site boundary, including Species of Principal Importance (Appendix 3); and
- Records of bats within one kilometre of the site boundary. Bat species are highly mobile and therefore the search radius is increased for this species group.

3.4.2 Multi-Agency Geographic Information for the Countryside

The Multi-Agency Geographic Information for the Countryside (MAGIC) database (DEFRA, 2020) was reviewed on 6th May 2020 to establish the location of statutory designated sites located within the vicinity of the site. This included a search for all internationally and nationally designated sites such as Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Wetlands of International Importance (Ramsar sites), Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs) within one kilometre of the site. See **Appendix 2** for details. Where appropriate, the desk study search area has been extended to take account of any appropriate statutory designated sites which need consideration in terms of potential in-direct effects and which support particularly mobile species, particularly those specifically mentioned in local planning policy. The Impact Risk Zones (IRZ) were also obtained from MAGIC, which are used to help guide and assess planning applications for likely effects on SSSIs.

Sites within one kilometre of the site boundary where European Protected Species Mitigation (EPSM) licences or Bat Low Impact Class Licences (BLICLs) have been granted were reviewed. This information allows a greater understanding of the potential for European protected species to be present in the local area.

3.4.3 Other Sources of Information

Online mapping resources, at an appropriate scale, were used to identify the presence of habitats such as woodland blocks, ponds, watercourses, and hedgerows, in the vicinity of the site. These habitats may offer resources and connectivity between the site and suitable habitat in the local area, which may be exploited by local species populations.

The Greengage 2016 Preliminary Ecological Appraisal report has been used to augment any existing relevant ecological information about the site.

3.5 Field Survey

3.5.1 Survey Methods

The initial field survey broadly followed standard Phase 1 habitat survey methodology (JNCC, 2010) and included a search for evidence of, and an assessment of the site's suitability to support, protected and notable species as recommended by CIEEM (CIEEM, 2017).

Protected and Notable Species Appraisal

A preliminary appraisal of the site's suitability to support legally protected and notable species was carried out. Specific methods for species/species groups considered during the appraisal are provided in **Appendix 4**.

3.5.2 Survey Details

The initial field survey was carried out by Jack Medley, Field Ecologist of ECOSA on 11th February 2020. The weather conditions were dry with approximately 60% cloud cover, an ambient temperature of 6°C and a moderate breeze.

During the survey, the surveyor was equipped with a ladder, 10x40 binoculars, a high powered torch, and a digital camera.

3.5.3 Field Survey Limitations

Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour. The field survey has therefore not produced a complete list of plants and animals and in the absence of evidence of any particular species should not be taken as conclusive proof that the species is absent or that it will not occur in the future.

Online mapping resources provide an indication of habitat features present in the wider area, but do not provide a detailed assessment of habitat types.

It is not always possible to provide definitive assessments of a species' presence/likely absence at a site and so in the absence of direct evidence, assessments and recommendations are based on the presence of suitable habitat within/adjacent to a site and the results of species records within the desk study data.

3.6 Bat Survey

3.6.1 Survey Methods

Bat Emergence Survey

The bat emergence survey was undertaken in line with current best practice guidelines (Collins, 2016). In accordance with the guidelines for a building assessed as having

low suitability to support roosting bats a single dusk emergence survey was undertaken in order to ascertain the presence/likely absence of roosting bats from within the building. Where the presence of roosting bats is confirmed the data also allows for an assessment of the status of the roost present. The status of roosts (where appropriate) has been based on standard terminology.

The surveys were carried out by two experienced ECOSA surveyors, positioned at previously identified vantage points around the building (**Map 2**). These vantage point locations allowed a sufficient coverage of the Potential Roosting Features identified on the building impacted by the proposals.

During the surveys, surveyors recorded the time, species, location, and direction of flight for each bat encountered, with particular attention paid to establishing bat access/egress locations to any roosts within the building.

3.6.2 Survey Details

Bat Emergence Survey

The single bat emergence survey was undertaken on the 4th May 2020. **Table 1** provides further details of the emergence survey.

Survey Date	Survey Type	Survey Timings	Weather Conditions	Sunset/ Sunrise Time
4 th May 2020	Emergence	Start: 20:13 End: 22:28	General conditions: dry Start temp: 16°C End temp: 11°C Cloud Cover: 0% Wind Speed: WF2 – WF3	20:28

Table 1: Bat emergence survey details

During the bat emergence survey the surveyors were equipped with Pettersson D240x time expansion and Batlogger M bat detectors. The Pettersson detectors were connected to Edirol R-05 recorders for the full duration of the survey. Recordings made with the detectors were later analysed using Sonobat[®] (v2.9.7) to confirm the identity of any species encountered.

The bat emergence/re-entry surveys were coordinated by Samantha Munslow, Principal Ecologist of ECOSA (Natural England Bat Licence 2015-16434-CLS-CLS) assisted by suitably qualified and experienced ECOSA surveyors David Miller and Olivia Walton, Assistant Ecologists of ECOSA.

3.6.3 Survey Limitations

Some bat species, e.g. long-eared bats *Plecotus* species⁶, generally emerge from their roosts in total darkness and do not produce strong echolocations, and therefore these bats can be difficult to observe and record during bat surveys, leading to under-recording.

The quality of hand-held bat detector recordings is based, to a large extent, on the proximity of a bat to the detector's microphone. Obstructions such as vegetation or environmental variables such as rainfall and wind noise from vegetation will all influence the quality of sound reaching the microphone and thus some bat echolocation recordings are of insufficient quality for specific identification. Bats routinely alter their echolocations in relation to behaviour and their environment. It is not always possible to make a robust identification of every bat recording.

The use of bat detectors is likely to result in the under-recording of a percentage of bats present, such as those flying at height (Collins & Jones, 2009), which would be out of the recording range for the detectors.

3.7 Criteria used to Assess Ecological Value

The evaluation criteria used in this report are based on ECOSA's professional judgement and publicly available publications, survey data and other sources as referenced in the main text. The evaluation is based on a sliding scale of importance as follows; international and European, national, regional, county, local and site. There are a wide range of characteristics which contribute to the importance of ecological features, and these may justify an increase or reduction in the value of an ecological feature. Where deviations occur, these will be explained in the evaluation section of this report (Section 4.0). Current published relevant guidance, including information sources such as A Nature Conservation Review (Ratcliffe, 1977) and Guidelines for Ecological Impact Assessment in the United Kingdom (CIEEM, 2018) have also been used to inform the assessment.

⁶ There are two species of long-eared bat, the brown long-eared bat *Plecotus auritus* and the grey long-eared bat *Plecotus austriacus*. These species can only be separated by examination of physical characteristics and Phylogenetic Analysis Identification of bat droppings. Unless confirmation of identification has been made by visual identification the two species shall be referred to in this report as long-eared bat. The brown long-eared bat is the commonest of the two species typically being found roosting within large roof voids although small voids and trees are also utilised. The grey long-eared bat is rare and confined to southern England and like the brown long-eared typically roosts in roof voids.

4.0 BASELINE ECOLOGICAL CONDITIONS AND EVALUATION

4.1 Introduction

This section details the results of the Ecological Impact Assessment undertaken for the site. It assesses the baseline ecological conditions of the site at the time the desktop study was completed and based on the findings of the field survey and subsequent protected species surveys. This section also provides an assessment of the ecological value of ecological features present at the site.

4.2 Statutory and Non-statutory Designated Sites

4.2.1 Baseline Ecological Conditions

Details of designated sites are provided in the paragraphs below.

Statutory Designated Sites

There is one statutory designated site of nature conservation interest situated within one kilometre of the site boundary. This is:

 Adelaide (LNR) – located approximately 800 metres west of the site and designated for meadows, scrub, woodland and pond habitats.

Further details of the statutory designations listed above are provided in **Appendix 5**.

Non-Statutory Designated Sites

There is one non-statutory designated site of nature conservation interest situated within 500 metres of the site boundary. This is:

 London's Canals (SINC) – located approximately 300 metres south of the site and designated for supporting a range of locally uncommon aquatic flora, important invertebrate fauna, a diverse fish community, and breeding waterfowl.

Further information on sites designated for nature conservation are provided in **Appendix 2**.

4.3 Habitats

4.3.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with GiGL and the MAGIC database returned no records of notable habitats on, or adjacent to, the site. This however does not confirm the absence of notable plants or habitats in the local area.

Field Survey Results

The impacts of the proposed works are limited to within the footprint of the on-site buildings and there are no other habitats on site. The wider area is dominated by buildings, with little green space in the surrounds.

4.4 Bats

4.4.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with GiGL returned recent (within the last ten years) records of at least five species of bat from within one kilometre of the site. The nearest of these was of common pipistrelle *Pipistrellus pipistrellus* located 340 metres south-east of the site. Other species recorded recently within one kilometre of the site include *Myotis* bat species⁷, noctule *Nyctalus noctule*, Nathusius' pipistrelle *Pipistrellus nathusii*, and soprano pipistrelle *Pipistrellus pygmaeus*.

Consultation with the MAGIC database did not reveal the presence of any recently granted EPSM licences within the one kilometre search radius.

Greengage assessed the on-site building as having low suitability to support roosting bats. A further bat emergence/re-entry survey was undertaken in September 2015, during which no bats were recorded roosting within the building (Greengage, 2016).

Field Survey Results

Building Assessment

For the purposes of this assessment, the entirety of 1 and 3 Ferdinand Place has been treated as a single building. No direct evidence of bats, such as individuals or droppings, were recorded during the survey.

The eastern portion of building is of brick construction with a two-storey section to the east with a clay tiled gable roof (**Figure 1**) and a single-storey section to the west with a flat gravel roof (**Figure 2**). The garage to the west is also of brick construction, with a flat bitumen felt roof. The two stores are of brick construction, with one having a pitched corrugated iron roof and one a pitched bitumen felt roof (**Figure 3**).

⁷ There are seven species of Myotis bats in Britain. Myotis bats are very difficult to identify specifically, this can generally only be done by examination of physical features and Phylogenetic Analysis Identification of bat droppings. Many of these bats are common and will utilise buildings for roosting often occupying small and inaccessible voids. For the purpose of this report all species shall be referred to as Myotis bats unless a specific identification has been possible.





Figure 1: Two-storey section viewed from Ferdinand Place to the east

Figure 2: One-storey and two-storey sections of the building and garage, viewed from the south



Figure 3: Stores at the western end of building

The two-storey section contains a roof void running the length of the building (**Figure 4**), shared between 1 and 3 Ferdinand Place, which is lined with breathable roof membrane (BRM) and close board panelling (**Figure 5**). The single-storey section has no roof void. No obvious entry or egress points were observed from within the roof void; however, an old wasp nest and old bird nest were recorded, suggesting access is possible from the exterior. There are no voids within the garage or either of the stores.



Figure 4: Roof void of two-storey section

Figure 5: BRM lining and close board panelling of roof void

A number of potential roosting features on the exterior of the two-storey section of the building were recorded including lifted and missing roof tiles on the east and west elevations (**Figure 6** and **Figure 7**), missing mortar in the tile joins, gaps between facias and brickwork, and a gap in a soffit box on the eastern elevation (**Figure 8**). No potential roosting features were recorded on the exterior of the garage or either of the stores.



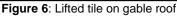




Figure 7: Missing tile on gable roof



Figure 8: Gap in soffit box on eastern elevation

Given the site's location, the presence of the roof void and suitable bat roosting features, the two-storey section of the building is assessed as having low suitability to support roosting bats. The other sections of the building are assessed as having negligible suitability to support roosting bats.

Foraging and Commuting Habitat

There is no suitable foraging or commuting habitat on site as the site comprises just a building. Therefore, the site is assessed as having negligible suitability to support foraging and commuting bats. There is suitable foraging and commuting habitat to a limited extent in the wider area in the form of residential gardens, roadside trees and vegetation.

Bat Emergence/Re-entry Survey Results

The survey recorded at least one species of bat: common pipistrelle *Pipistrellus pipistrellus*. No bats were recorded emerging from 1-3 Ferdinand Place.

Table 2 provides details of the species, numbers and locations of bats recorded foraging/commuting during the emergence survey.

Table 2: Bat Emergence Survey Res	sults
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Survey Date:	4 th May 2020
Structures Surveyed:	1-3 Ferdinand Place
Survey Type:	Dusk Emergence Survey
Time of Sunset:	20:28
General Bat Activity	

Low levels of foraging and commuting common pipistrelle were recorded off site during the survey. The bats seen during the survey were flying at height and their activity was not associated with the site itself.

4.4.2 Evaluation

No bats were recorded emerging from the on-site building during the survey and the survey therefore suggests bats are no using the building for roosting. Low levels of foraging/commuting common pipistrelle bats were recorded off site, some distance away.

4.5 Birds

4.5.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with GiGL returned recent (within the last ten years) records of five notable bird species. These are the BTO Birds of Conservation Concern red listed⁸ herring gull *Larus argentatus*, grey wagtail *Motacilla cinereal*, house sparrow *Passer domesticus*, starling *Sturnus vulgaris* and the amber listed⁹ swift *Apus apus* and house martin *Delichon urbicum*.

⁸ The UK's birds are split in to three categories of conservation importance - red, amber and green. Red is the highest conservation priority, with species needing urgent action. Amber is the next most critical group, followed by green. Red List criteria include species which are: globally threatened; have been subject to historical population decline in UK during 1800–1995; are in severe (at least 50%) decline in UK breeding population over last 25 years, or longer-term period, or; subject to severe (at least 50%) contraction of UK breeding range over last 25 years, or longer-term period.

⁹ Amber list criteria include species which are: in unfavourable conservation status in Europe; subject to historical population decline during 1800–1995, but recovering; subject to moderate (25-49%) decline in UK breeding population or contraction of UK breeding range over last 25 years, or the longer-term period; subject to moderate (25-49%) decline in UK non-breeding population over last 25 years, or the longer-term period; rare breeders (1–300 breeding pairs in UK); rare non-breeders (less than 900 individuals), or; internationally important species with at least 20% of European breeding or non-breeding population in UK.

Greengage previously identified the potential for house sparrow to roost within the site (Greengage, 2016)

Field Survey Results

The site offers suitable habitat for breeding birds, including starling, within the roof void of the two-storey building. During the survey a disused bird nest was recorded within the roof void of the two-storey building. A wood pigeon *Columba palumbus* was also recorded perching on the gable roof of the building.

The surrounding area is highly built up and urban in character with high levels of anthropogenic disturbance. The buildings and trees in the surrounds may offer further suitable nesting habitat. It is likely only bird species common and widespread within cities, with a high tolerance to disturbance are present in the local area.

During the bat dusk emergence survey on the 4th May 2020, a starling was recorded emerging and re-entering a gap under the wooden fascia at the south-eastern corner of the two-storey building (**Figure 9**) within the soffit board, at approximately 20:45. Upon re-entry the bird was seen holding nesting material within its mouth, confirming the presence of a starling nest.



Figure 9: Gap within 1-3 Ferdinand Place where starling nest was recorded

4.5.2 Evaluation

Due to the presence of the starling nest on site, and given that there is likely extensive suitable nesting habitat in the surrounds in the form of roof voids within buildings, the site is assessed as being of no more than local value for breeding birds.

5.0 ASSESSMENT OF ECOLOGICAL EFFECTS AND MITIGATION/COMPENSATION/ ENHANCEMENT MEASURES

5.1 Introduction

This section assesses the ecological effects of the proposed development scheme on the identified ecological features as identified in Section 4.0. Methods for addressing potential impacts on ecological features have been approached in accordance with the mitigation hierarchy¹⁰ with avoidance of impacts prioritised where possible. Where significant adverse effects cannot be avoided other forms of mitigation are prioritised overcompensation. Enhancement measures have been detailed, where relevant, in order to not only minimise the impacts on biodiversity but also to provide enhancement in accordance with Paragraph 170 of the NPPF (Paragraph 2.2). It is anticipated that mitigation, compensation, and enhancement measures will be secured through the planning process.

5.2 Scheme Design

The proposed development entails the demolition of the existing buildings and the erection of a four-storey building, with office space on the ground floor, nine residential flats on the upper floors and a roof terrace. Residential and commercial access will be facilitated from Ferdinand Place to the south. Lighting proposals are currently unknown however external lighting may form part of the scheme.

The potential ecological impacts and effects of these proposals, in the absence of mitigation, are described for each ecological feature below. For each ecological feature, measures to mitigate and/or compensate for significant effects are described.

5.3 Designated Sites

5.3.1 Potential Impacts and Effects

As the site is situated within a well built-up area, it is not connected to any designated sites, and therefore no impacts on designated sites are anticipated as a result of the proposals.

5.3.2 Mitigation Measures

No mitigation measures in respect of designated sites are required.

5.3.3 Significance of Residual Effects

No significant residual effects on designated sites are anticipated.

¹⁰ In accordance with CIEEM Ecological Impact Assessment guidance (CIEEM, 2018) a sequential process is adopted to address impacts on features of ecological interest, with 'Avoidance' prioritised at the top of the hierarchy and Compensation/Enhancement' at the bottom. This is often referred to as the 'mitigation hierarchy'.

5.3.4 Compensation

No compensation in respect of designated sites is required.

5.3.5 Enhancement

No enhancement in respect of designated sites is required.

5.4 Habitats

5.4.1 Potential Impacts and Effects

As the site comprises only buildings, no impacts on habitats are anticipated as a result of the proposals.

5.4.2 Mitigation Measures

No mitigation measures in respect of habitats are required.

5.4.3 Significance of Residual Effects

No significant residual effects on habitats are anticipated.

5.4.4 Compensation

No compensation in respect of habitats is required.

5.4.5 Enhancement

It was recommended, during the consultation period of the proposals and within the initial Preliminary Ecological Appraisal, that a green roof be incorporated into the design. In the absence of the inclusion of a green roof, terrace planting should comprise species known to benefit wildlife such as bird's foot trefoil *Lotus corniculatus*, lady's bedstraw *Galium verum*, selfheal Prunella vulgaris, common knapweed *Centaurea nigra*, yarrow *Achillea millefolium* and kidney vetch *Anthyllis vulneraria* in an effort to attract invertebrates such as moths, butterflies and bees.

5.5 Bats

5.5.1 Potential Impacts and Effects

As bats are assessed as absent from the site, no direct impacts are anticipated as a result of the proposals.

5.5.2 Mitigation Measures

No mitigation measures in respect of roosting bats are required. Foraging/commuting bats were recorded during the bat survey and common pipistrelle activity was included in the desk study data within a 340-metre distance of the site. To avoid additional lighting levels within the local area, it is recommended that any external lighting is avoided. If unavoidable, the external lighting design should take account of Bat Conservation Trust and Institute of Lighting Professionals Guidance Note 08/18 "Bats

and Artificial Lighting in the UK". Ideally the bulbs should be LED and at the warmer end of the spectrum (e.g. avoiding blue or white light) and lux levels should be as low as possible.

5.5.3 Significance of Residual Effects

No residual effects on bats are anticipated.

5.5.4 Compensation

No compensation in respect of bats is required.

5.5.5 Enhancement

As a form of enhancement, two build-in WoodStone bat boxes, or similar, should be incorporated into the newly constructed building to provide new roosting opportunities for bats on site.

5.6 Birds

5.6.1 Potential Impacts and Effects

Given the presence of a starling nest within the on-site building, demolition of the existing building has the potential to result in the killing and injuring of breeding birds. Additionally, the proposals will result in the loss of suitable nesting habitat in the form of the roof void.

All birds, their nests, eggs, and young are legally protected, with certain exceptions, under the Wildlife and Countryside Act 1981 (as amended). Refer to **Appendix 3** for details.

5.6.2 Mitigation Measures

Demolition of the building will be undertaken outside of the nesting bird season (March to August inclusive). If this is not possible, the exterior and interior of the building and roof void will be inspected by a suitably qualified ecologist immediately prior to demolition. If an active nest is recorded, demolition would need to be postponed until the young had fledged the nest; this would have an impact on the construction programme.

5.6.3 Significance of Residual Effects

No significant residual effects on birds are anticipated.

5.6.4 Compensation

In order to compensate for the loss of nesting habitat caused by the demolition of the existing building, two Vivara Pro WoodStone Starling Nest Boxes, or similar, will be erected on the exterior of the newly constructed building.

5.6.5 Enhancement

No enhancement in respect of birds is recommended.

5.7 Cumulative Effects

Assuming that the mitigation and compensation measures outlined in the paragraphs above are implemented, no significant residual effects are anticipated. As such it is considered unlikely that the proposals will contribute to cumulative adverse effects in association with other proposals in the local area.

6.0 CONCLUSIONS

6.1 Conclusion

The site has suitability to support breeding birds and an active starling nest is present in the building. From a single emergence survey, bats are assessed as likely absent from the site. The proposals have the potential to cause direct harm to nesting starlings and therefore there is a need for sensitive timing of demolition works to avoid the main nesting season. Bird boxes will be erected on the exterior of the building as a compensation measure and the site will be enhanced for bats through the installation of additional bat roosting features. Post-development, no residual or cumulative impacts are anticipated. As such it is considered that the proposals will accord with all relevant national and local planning policy in relation to ecology including Policy A3 of the Camden Local Plan and the NPPF (see Section 2.0).

6.2 Updating Site Survey

If the planning application boundary changes or the proposals for the site alter, a reassessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey work may be required, particularly if development does not commence within 18 months of the date of the most recent relevant survey.

7.0 REFERENCES

CIEEM, 2017. Chartered Institute of Ecology and Environmental Management Website. [Online]

Available at: <u>www.cieem.net</u>

CIEEM, 2017. *Guidelines for Ecological Report Writing.* 2nd ed. Winchester: Chartered Institute of Ecology and Environmental Management.

CIEEM, 2017. *Guidelines for Preliminary Ecological Appraisal.* 2nd ed. Winchester: Chartered Instute of Ecology and Environmental Management.

CIEEM, 2018. *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine.* Winchester: Chartered Institute of Ecology and Environmental Management.

Collins, J., 2016. *Bat Surveys for Professional Ecologists: Good Practice Guidelines.* 3rd ed. London: Bat Conservation Trust.

Collins, J. & Jones, G., 2009. Differences in Bat Activity in Relation to bat Detector Height: Implications for Bat Surveys at Proposed Windfarm Sites. *Acta Chiropterologica*, 11(2), pp. 343-350.

DEFRA, 2020. *Multi-Agency Geographic Information for the Countryside (MAGIC) Map Application.* [Online]

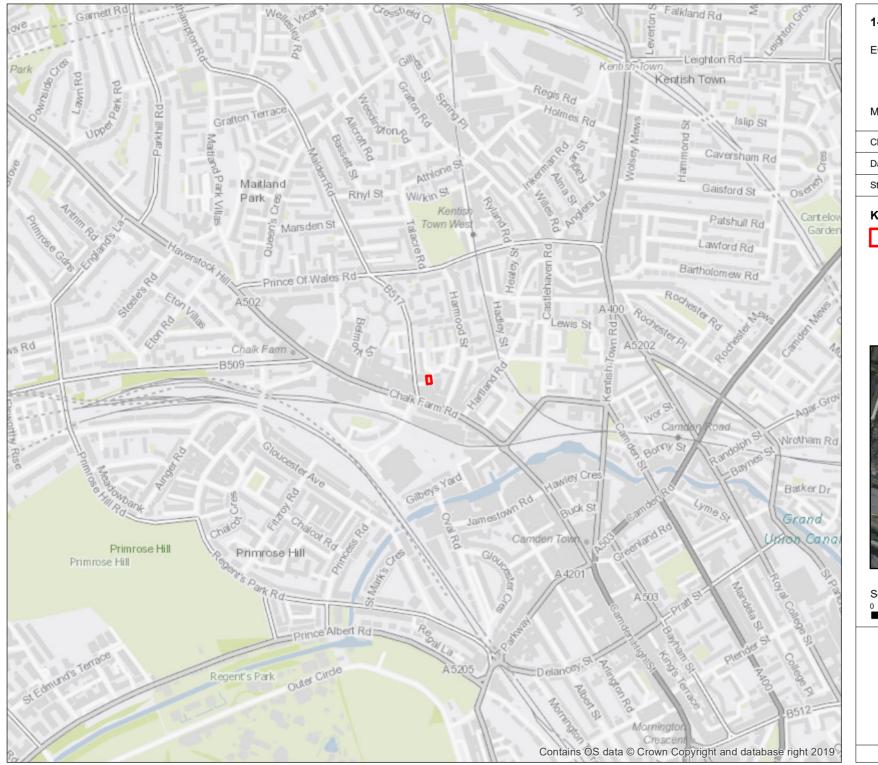
Available at: www.defra.magic.gov.uk

Greengage, 2016. Ferdinand Place, Camden - Preliminary Ecological Appraisal Report (BREEAM compliant), London: Greengage.

JNCC, 2010. *Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit.* Peterborough: Joint Nature Conservation Committee.

Ratcliffe, D., 1977. *A Nature Conservation Review.* Cambridge: Cambridge University Press.

Map 1Site Location Plan





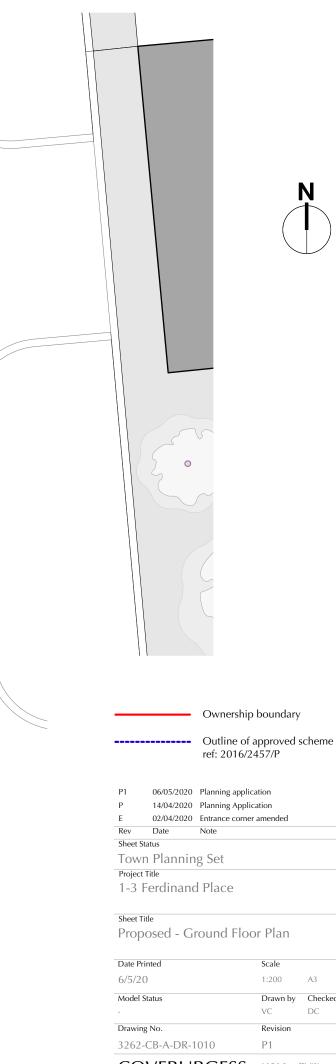
Map 2 Bat Surveyor Locations



Ferdinand Street

Appendix 1 Proposed Site Layout







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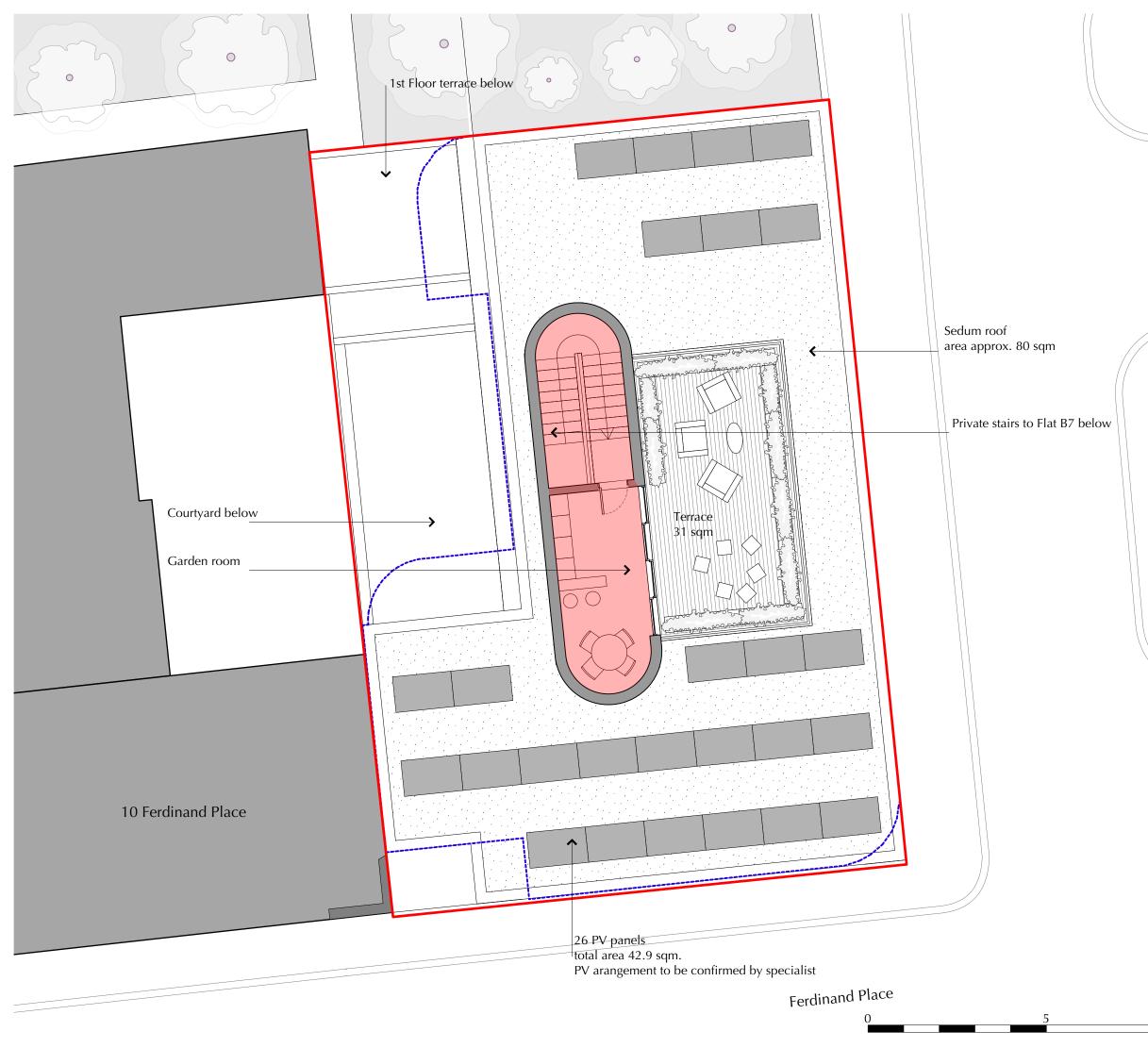
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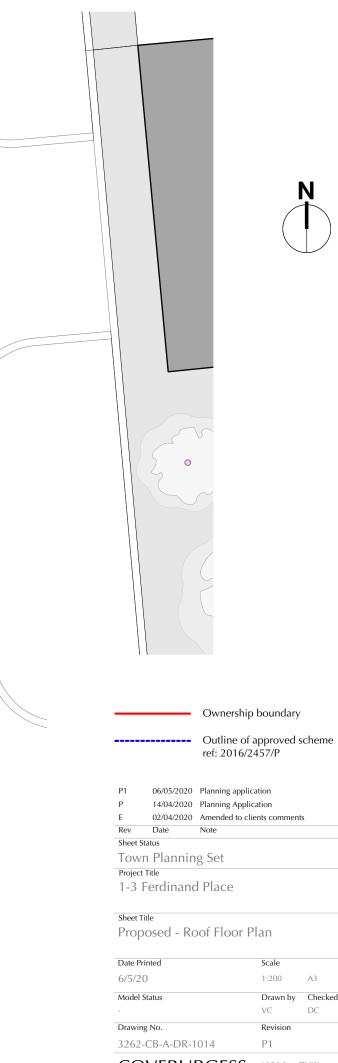


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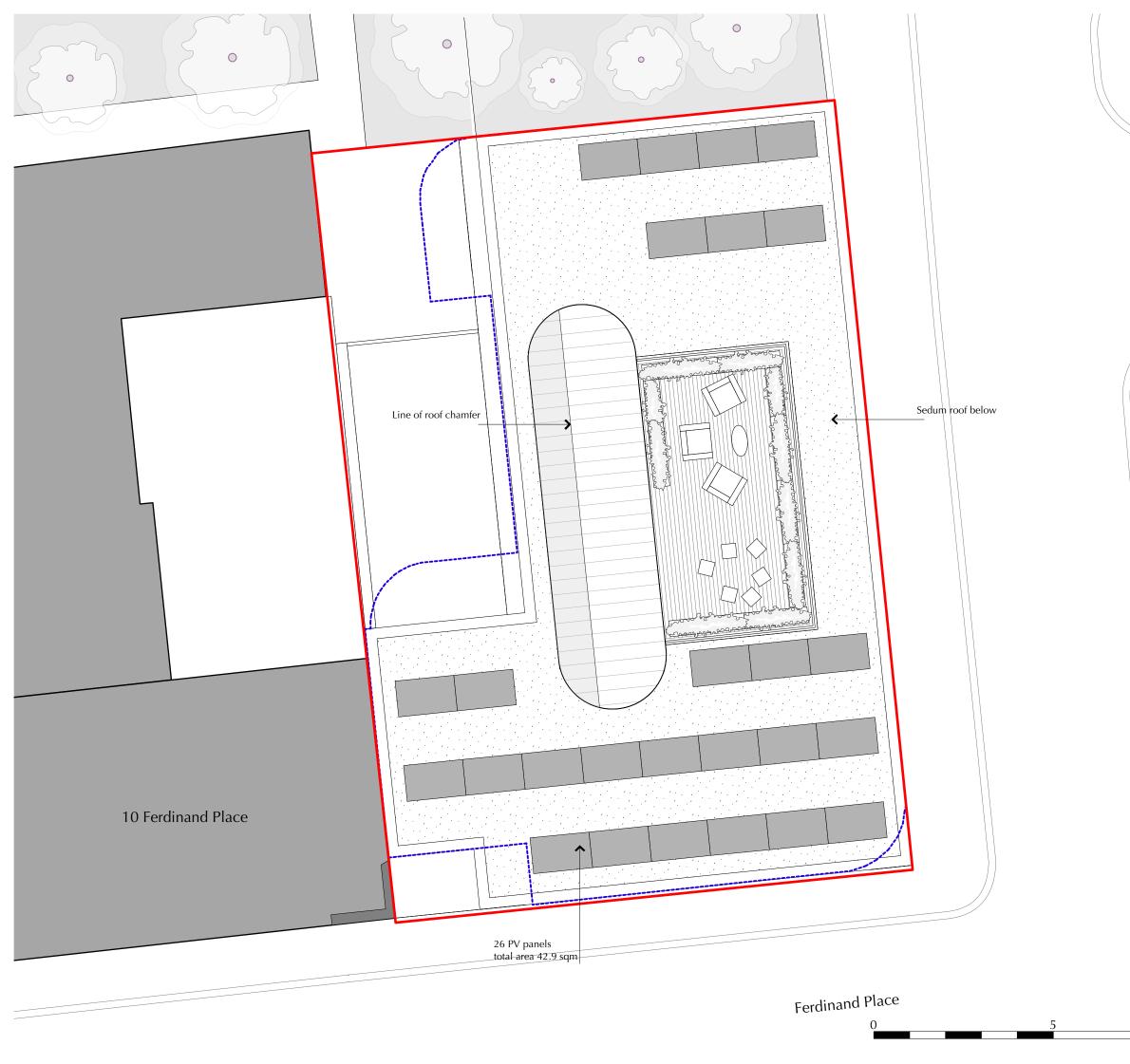


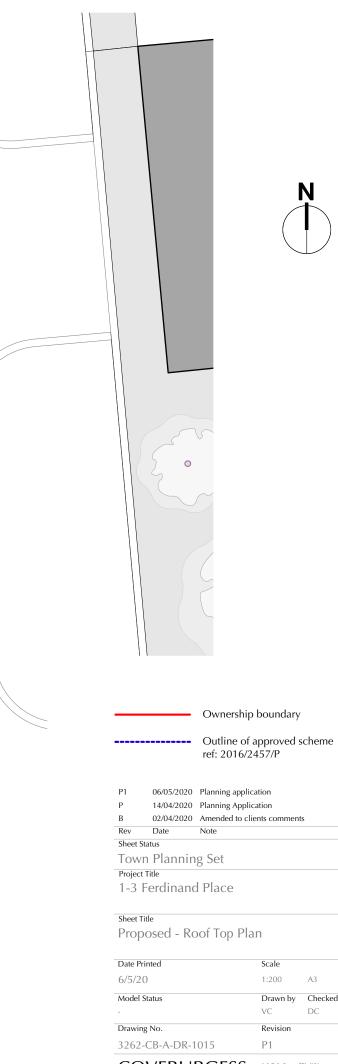
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Appendix 2 Sites Designated for Nature Conservation

Statutory Sites

Locally Designated Sites – Local Nature Reserves

Local Nature Reserves (LNR) are designated by local authorities under the National Park and Access to the Countryside Act 1949. These are generally designated not only for their local wildlife value but also for education, scientific and recreational purposes. These sites generally receive protection from development through the planning system.

Non-Statutory Sites

Locally Designated Sites

In addition to statutory designations, local authorities often designate sites of nature conservation importance at the local level. Such designations are named differently by each local authority and may be referred to as Local Wildlife Sites (LWS), Sites of Importance for Nature Conservation (SINC) or Sites of Nature Conservation Importance (SNCI), amongst others. The exact level of protection afforded to these sites varies and is normally defined through local planning policy.

Appendix 3 Relevant Legislation

Breeding Birds

With certain exceptions, all wild birds, their nests and eggs are protected by Section 1 of the Wildlife and Countryside Act 1981 (as amended). Therefore, it is an offence, to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; or
- Intentionally take or destroy the egg of any wild bird.

These offences do not apply to hunting of birds listed in Schedule 2 subject to various controls. Bird species listed on Schedule 1 of the Act receive further protection, thus for these species it is also an offence to:

- Intentionally or recklessly disturb any bird while it is nest building, or is at a nest containing eggs or young; or
- Intentionally or recklessly disturb the dependent young of any such bird.

Appendix 4 Protected and Notable Species Appraisal Methods

Bats

The survey conformed to current Bat Conservation Trust guidelines (Collins, 2016). An assessment was made of the suitability of buildings on the site and immediately on the site boundary to support roosting bats based on the presence of features such as loose or missing roof tiles or lifted lead flashing. A detailed external and internal inspection of accessible structures was undertaken to compile information on potential and actual bat entry/exit points; potential and actual bat roosting locations; any evidence of bats found.

An assessment was made of the suitability of the site and the surrounding landscape to support foraging and/or commuting bat species. The assessment of the potential for the site to support roosting, foraging and commuting bat is based on a four-point scale as detailed in **Appendix 6**.

Birds

The appraisal of breeding birds on the site was based on the suitability of habitat present to support nesting bird communities, the presence of bird species that may potentially nest within the available habitat and evidence of nesting such as old or currently active nests.

The assessment of wintering birds was based on an assessment of the suitability of the habitat on site to support important wintering bird species and populations. Particular attention was paid to the potential for the site to support wintering farmland bird species, waders and wildfowl.

Appendix 5 Statutory Designated Sites within the Desktop Study Area

Details of statutory designated sites within the desktop study area, as listed in Paragraph 4.2.1, are provided in **Table 3**.

Table 3: Statutory Designated Sites Located Within the Desktop Study Area

Site Name	Adelaide
Site Designation	LNR
Approximate Relative Location	800 metres west
Reasons for Designation:	
Designated for meadows, scrub, woodland, and pond habitats.	

Appendix 6 Appraisal Criteria for Bats

The criteria used to assess the suitability of roosting and foraging/commuting habitat for bats is based on industry guidelines and outlined in **Table 4**¹¹.

Suitability	Description of roosting habitats	Commuting and foraging habitats
High	A structure or tree 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.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
Moderate	A structure of tree 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.	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically/structure that does not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerows or un-vegetated stream, but isolated (i.e. not very well connected to the surrounding landscape by other habitat). Suitable, but isolated, habitat that could be used by small numbers of foraging bats such as a lone tree or a patch or scrub.
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.

able 4: Criteria used to Assess Suitability of Roosting and Foraging/Commuting Habitat for Bats

¹¹ Table adapted from (Collins, 2016)