
Kirkby Valley Golf Club

Protected Species Report (Bats): Buildings

Compiled by Ecology Services Ltd.

on behalf of

L32 Trading Ltd.

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1.0 Introduction

- 1.1 Ecology Services Limited was commissioned by L32 Trading Ltd. in May 2019 to carry out a Preliminary Roost Assessment (PRA) of a complex of buildings at Kirkby Valley Golf Club, Ingoe Ln, Liverpool, L32 4SS. The buildings subject to the survey are located by NGR 339839, 397784. The location of these buildings is shown on Figure 1. As over a year had passed since the initial PRA and bat presence/absence surveys, updated surveys were commissioned by L32 Trading Ltd. in July 2020.
- 1.2 Recommendations made following the Preliminary Roost Assessment included the requirement for further presence/ absence surveys in relation to bats to be carried out. The results of these are provided within this report.

Site description

- 1.3 The survey included an inspection of a single complex of buildings located in the south-east of Kirkby Valley Golf Club, which forms part of a wider application site also including land to the south-west of the golf course bounded by Valley Road to the south and Aintree Lane to the west, collectively referred to as 'the site'.
- 1.4 The wider golf course is dominated by amenity grassland with stands of scattered trees, plantation woodland and occasional rough grassland, scrub, ponds and ditches. The south-western area of the site comprises three fields of unmanaged rough grassland with scattered trees, tall ruderal vegetation, wet grassland and hedgerows along the field boundaries. The River Alt runs south to north through the centre of the site and along the northern boundary of the wider golf course lies the railway.

Proposals

- 1.5 Four parcels of land within the site, collectively referred to as the 'development area', are proposed for (re)development as shown on Figure 2 including:
- Reconfiguration and other improvement works across the entire golf course including the reshaping of tees / greens / bunkers and erection of a footbridge over the River Alt to provide both an improved 18 hole course and a new 9 hole course.
 - New and improved irrigation / drainage works (including irrigation lake), extensive tree and shrub planting, and ecological mitigation measures across the course.
 - The erection of a new 2 storey Clubhouse;
 - Retention, alteration and extension of the existing clubhouse and its change of use to form a golf-related / grounds maintenance training academy (existing access and car park retained / unchanged).
 - A new greenkeeper's compound with associated building and security fencing.
 - Provision of an adventure golf course and practice putting green; and provision of a golf driving range with an associated 2 storey building and external lighting and safety netting.
 - 6 synthetic outdoor 5-a-side football pitches, 5 synthetic outdoor tennis courts, 1 external bowling green with associated timber players' hut plus associated lighting and means of enclosure.
 - Car and cycle parking spaces to serve all of the above facilities with two new vehicular accesses created onto Valley Road.
 - Formation of a new gated access via Aintree Lane for the use of construction traffic and (upon completion of development works) for the sole use of course operatives for the purposes of course management / maintenance.

- 1.6 Two lakes are also proposed to assist with course irrigation and ecological mitigation at the site.

Background and survey objectives

- 1.7 The aim of the preliminary roost assessment was to:
- Undertake a visual inspection of the site to establish baseline conditions;
 - Complete an assessment to ascertain if potential or evidence of use existed for bat species; and
 - Determine if there are requirements for further and/or more detailed surveys in respect to the proposed works.
- 1.8 Following the preliminary roost assessment, presence/ absence surveys were recommended in the form of dusk emergence/ dawn re-entry surveys to enable robust data to be collected to determine the presence/ likely absence of roosting bats. The presence/ absence surveys included all buildings that contain bat roost potential and have the potential to be affected by the proposals.
- 1.9 The purpose of this report is to state the survey methodologies, present the results of the surveys, evaluate the findings, assess the impacts of the proposals and make recommendations concerning the protection of bat species that may be present at this site. Where possible the report will aim to provide sufficient information to allow a local authority to assess the potential impacts of the proposed works on roosting bats.

2.0 Planning Policy and Legislation

- 2.1 This section provides a brief overview of planning policy and legislation relevant to bats in the UK. Further information is provided in Appendix 1.

Planning Policy

- 2.2 The National Planning Policy Framework (NPPF, 2021) places a clear responsibility on Local Planning Authorities (LPAs) to contribute to conserving and enhancing the natural and local environment. LPAs should promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species (e.g. Species of Principal importance, Local Biodiversity Action Plan species); and identify and pursue opportunities for securing measurable net gains for biodiversity. In accordance with the NPPF, local planning policy and guidance, development proposals should seek to maintain and enhance opportunities for bats at the site.
- 2.3 Protected species within the UK, such as bats, are a 'material consideration' in the determination of a planning application. Therefore, an LPA is unlikely to determine an application until all relevant information relating to protected species or habitats is submitted to fully inform the planning decision. Relevant information includes adequate surveys and, where required, mitigation strategies, which will need to be submitted to inform a planning application.
- 2.4 The local planning authority (LPA) has a duty to ensure that protected and priority species (e.g. Species of Principal Importance, Biodiversity Action Plan species) are fully considered in a planning decision. Therefore, up to date survey information and, where required, mitigation strategies adequate to assess the impacts of the proposals and to demonstrate that opportunities for species using the site can be maintained, must be provided in support of a planning application.

Legislation

- 2.5 All bats and their roosts receive strict protection under the Wildlife & Countryside Act 1981 (as amended) and the Conservation of Habitats & Species Regulations 2017 (as amended)¹, which implements the EC Habitats Directive in the UK. In brief, this legislation makes it an offence to: kill, injure or capture a bat; to destroy, damage or obstruct access to a bat roost; or to disturb a bat occupying a roost. A Local Authority is a 'competent authority' within the context of Regulation 7 of the Conservation of Habitats & Species Regulations 2017 (as amended) when dealing with planning applications where a European Protected Species (EPS) (all bat species) may be affected. Therefore, planning decisions should only be made when European Protected Species and their habitats are fully taken into account.,
- 2.6 Where proposed works are likely to contravene the legislation protecting bats, a Natural England derogation licence must be applied for, and approved, before works can proceed.
- 2.7 Section 40 of the Natural Environmental and Rural Communities (NERC) Act 2006 places a statutory duty on public authorities, in exercising their functions, to conserve biodiversity in England. Species of Principal Importance for the conservation of biodiversity in England, identified by the Secretary of State in consultation with Natural England, are listed Section 41 of the NERC Act. The Local Planning Authority and government bodies (e.g. Natural England) will expect the overall design of the development to have regard for the conservation of these species. Seven bat species are listed as 'Species of Principal Importance' under Section 41 of the Natural Environmental and Rural Communities (NERC) Act 2006:
- Noctule (*Nyctalus noctula*)
 - Soprano pipistrelle (*Pipistrellus pygmaeus*)
 - Lesser horseshoe (*Rhinolophus hipposideros*)
 - Greater horseshoe (*Rhinolophus ferrumequinum*)
 - Barbastelle (*Barbastella barbastellus*)
 - Bechstein's (*Myotis bechsteinii*)
 - Brown long-eared (*Plecotus auritus*)

3.0 Methodology

Desktop Study

- 3.1 Ecological data and records searches were undertaken by contacting the sources listed in Table 1.

Table 1: Ecological Desktop Study Sources

Source of information	Information supplied
North Merseyside Local Biodiversity Action Plan (NMBAP)	Identification of local BAP species and habitats known to occur in the region.
Natural Environment and Rural Communities (NERC) Act 2006	Review of Habitats/Species of Principal Importance known to occur in the region.
Multi Agency Geographical Information Centre (MAGIC)	Statutory protected sites designated for their bat interest within 5km of the site.

¹ The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 continue the same provision for European protected species, licensing requirements and protected areas after Brexit.

Source of information	Information supplied
	Records of bat roosts relating to Natural England EPS licences within 2km of the site.
Merseyside Biobank	Non-statutory protected sites designated for their bat interest and any records of bats within 2km of the site.

- 3.2 The data search with MEAS was undertaken on 15th January 2021.

Preliminary Roost Assessment Survey

- 3.3 The preliminary roost assessment for buildings followed the below methodology, which is based on the methods set out in the Bat Conservation Trust's 'Bat Surveys for Professional Ecologists: Good Practice Guidelines' (2016). Each building was categorised according to its level of suitability and any evidence of roosting bats found during the inspection (see Appendix 2).
- 3.4 An interior and exterior inspection of the buildings was undertaken to search for any potential roosting features and evidence of roosting bats. Signs surveyed for included droppings, dead bats, feeding remains (beetle, moth and butterfly remains), urine staining and grease marks around crevices and down walls, and any noises such as scratching and audible bat calls. An Explorer Premium 8803AL (9mm) endoscope and LED torch were used to check any accessible features. A Clulite Long Ranger LED Pistol Light (1200 lumens) and close focusing binoculars were used to better assess any features of interest which were not accessible. High resolution photographs were taken for later review.
- 3.5 During the survey, the surrounding area was assessed in relation to suitable habitat that may be of value to bats.
- 3.6 Preliminary roost assessments of buildings can be undertaken at any of the year and can provide conclusive results, which can save expense and time for a planning applicant. The optimum time to investigate the presence of bats is usually during their active season when signs of presence can be more easily located, although this is dependent on the type of roost being inspected.

Personnel

- 3.7 The 2019 PRA inspection survey was undertaken by Consultant Ecologist Mr. A. Leishman, who holds a Bat Class 2 Licence (Registration number 2017-29436-CLS-CLS).
- 3.8 The 2020 updated PRA inspection survey was undertaken by Consultant Ecologist Miss. C. Wood, agented under Mrs. L. Eccles-Sargeant Bat Class Licence Level 1 (Registration number 2015-13762 -CLS-CLS).

Timing

- 3.9 The 2019 PRA inspection survey was conducted on the 15th May 2019.
- 3.10 The daytime survey was conducted at a time when bats will be active. Feeding will occur on most nights and roost sites, in particular suitable maternity roosts for females, are being sought. Evidence of bat occupation is likely to be detected, should they be present at the site.
- 3.11 The 2020 updated PRA inspection survey was conducted on 5th August 2020.
- 3.12 The 2020 daytime survey was conducted at a time when bats are fully active, towards the end of the maternity season. Maternity colonies will be dispersing or have already dispersed

as their focus turns to the mating season and the beginning of building up fat reserves. Evidence of bat occupation is likely to be detected, should they be present at the site.

Presence/ Absence Surveys

- 3.13 Presence/ absence surveys were carried out in accordance with the Bat Conservation Trust's 'Bat Surveys for Professional Ecologists: Good Practice Guidelines', which recommends timings and minimum number of survey visits for presence/ absence surveys to give confidence in a negative result for structures (and trees although unlikely to give confidence in a negative result). See Appendix 3 for full details. These are determined by the level of potential assigned to each individual building, structure or tree. See Appendix 2 for the full table.
- 3.14 The presence/ absence surveys required up to eight surveyors to enable all previously identified bat roosting features to be covered. Surveyors noted any visual observations of bat activity and were aided by the use of the following equipment; Batbox Duet, a heterodyne and frequency division bat detector and Magenta Bat5, a heterodyne bat detector, used in conjunction with an AnaBat SD1/2, Express or Swift detector, which were set to record so that data could be analysed if required. A Canon XA-40 infrared camera was also used along with two no.96 infrared LED lights.
- 3.15 In 2019 a total of three presence/ absence surveys, comprising one presence/absence survey of Building 1 (low bat roost potential) and two presence/ absence surveys of Buildings 2 and 3 (moderate bat roost potential), were undertaken at the site at an optimal time of year over the active breeding season of bats. These were conducted between the 17th of June 2019 and the 12th of July 2019 inclusive and consisted of two dusk emergence surveys (Buildings 1 and 2 on one night and Building 3 on a separate night) and one dawn re-entry survey of Buildings 2 and 3).
- 3.16 In 2020, a total of three presence/ absence surveys, comprising one presence/absence survey of Building 1 (low bat roost potential), two presence/ absence surveys of Buildings 2 and 3 (moderate bat roost potential) and an additional presence/absence survey of Building 2, were undertaken at the site at an optimal time of year over the active breeding season of bats. These were conducted between the 5th of August 2020 and the 21st of September 2020 inclusive and consisted of two dusk emergence surveys of Buildings 1 and 2, one dawn re-entry survey of Buildings 2 and 3 and an additional dusk emergence survey of Building 2.

Personnel

- 3.17 The 2019 presence/ absence surveys were conducted by Senior Consultant Ecologists Mr. S. Booth who holds a Bat Class Licence Level 2 (Registration number 2016-27296-CLS-CLS) and Ms. L Redgrave MA (Oxon) MSc CEcol CEnv MCIEEM and experienced consultant ecologists who have regularly been involved with presence/ absence surveys including; Miss. C. Wood BSc (Hons), MSc, Mr. B. Meadows BSc (Hons), Mr. C. Smith BA, MSc, Mr. J. Perkins BSc (Hons), Mr. M. Barnes BSc (Hons) and Miss N. Burdin.
- 3.18 The 2020 presence/ absence surveys were conducted by Senior Consultant Ecologist Ms. L Redgrave MA (Oxon) MSc CEcol CEnv MCIEEM and experienced consultant ecologists who have regularly been involved with presence/ absence surveys including; Mrs Z. Foster who holds a Bat Class Licence Level 2 (Registration number 2015-17219-CLS-CLS), Miss. C. Wood BSc (Hons) MSc, Mr. B. Meadows BSc (Hons), Mr. C. Smith BA, MSc, Mr. L. Moat and Mr. M. Barnes MSc (Hons).

Timing

- 3.19 The 2019 presence/ absence surveys were undertaken between the 17th of June 2019 and the 12th of July 2019 during the peak activity season of bats and when maternity colonies are in occupation.
- 3.20 The updated presence/absence surveys were undertaken between the 5th August 2020 and the 21st September 2020 during the peak activity season of bats and when bats are fully active, towards the end of the maternity season. Maternity colonies will be dispersing or have already dispersed as their focus turns to the mating season and the beginning of building up fat reserves. Evidence of bat occupation is likely to be detected, should they be present at the site.

Roost Status

- 3.21 If evidence of a bat roost is recorded during the surveys, the status of the roost is evaluated based on its function. This requires sufficient survey effort to determine the species and numbers of roosting bats present, the time of year that the roost is used and characteristics of the roost itself. The Bat Conservation Trust's 'Bat Surveys for Professional Ecologists: Good Practice Guidelines' details types of bat roosts which may be defined in several ways, as below:
- Day roost – where individual bats or small groups of males, rest or shelter in the day.
 - Night roost – where bats rest or shelter in the night but are rarely found during the day.
 - Feeding roost – where individual or few bat/s rest or feed during the night.
 - Transitional/occasional roost – used for short periods of time by few or occasionally small groups of bats on waking or prior to the hibernation period.
 - Swarming site – large numbers of males and females gather during late summer to autumn.
 - Mating sites – where mating takes place from late summer and through winter.
 - Maternity roost – where females give birth and raise their young.
 - Hibernation roost - where bats may be found during winter. To have a constant cool temperature with high humidity.
 - Satellite roost – an alternative roost used by individual to small numbers of breeding females over the breeding season. Usually close to main nursery colony.

- 3.22 Roost selection is often closely correlated with presence of suitable foraging habitat within a reasonable commuting distance from the roost. Different roost sites are used throughout the active season which is most dependent upon roost microclimate and abundance of invertebrate prey nearby. Weather conditions can also affect the ability of bats to successfully forage. All British bats are insectivorous.

Constraints

- 3.23 The preliminary roost assessment was conducted within the active season of bats; and when females will be starting to look for and form maternity roosts, which is an optimal time of year for detecting presence of bats.
- 3.24 The buildings surveyed all had flat roofs and therefore have no roof spaces accessible for internal inspection. This is a common constraint for buildings of this nature and this is taken into account when assessing the potential suitability of the buildings for roosting bats and when recommending further presence/ absence surveys.

- 3.25 Overall, there were considered to be no significant constraints to the surveys undertaken in 2019 and 2020. Where there was incomplete access to areas of the building, this limitation has been taken into consideration when assessing potential impacts of the works and making recommendations for further survey work.
- 3.26 During the 2019 presence/ absence bat surveys, the surveyor's view of the southern elevation Building 1 was partially blocked by trees and a container. A weeping willow obscured the eastern corner of Building 2 and the surveyor's view of the north eastern elevation of Building 2 was obscured by trees and shrubs. There were light rain showers during the survey of Building 3 on 18th June 2019 and the survey was stopped one hour after sunset, however bat activity was recorded and the survey is considered to be valid. These constraints are taken into consideration in the evaluation and recommendations.
- 3.27 During the presence/absence surveys in 2020 the surveyor's view of the southern elevation of Building 1 was partially blocked due to trees. A weeping willow obscured the eastern corner of Building 2 and the surveyor's view of the north eastern elevation of Building 2 was obscured by trees and shrubs. Security lights were also present on Building 2, which may have slightly obscured the surveyor's view. These constraints are taken into consideration in the evaluation and recommendations.

4.0 Results and Evaluation

Desktop Study

National Status

- 4.1 There are 18 species of bat that are native to the United Kingdom. The latest Review of the Conservation Status of British Mammals (2018) has shown that where change could be assessed with reasonable confidence there have been increases in the geographical range and population status of two species of UK bat (greater and lesser horseshoe bat) and decrease in the geographical range of one species (grey long-eared bat).
- 4.2 Increases in population were also identified in the following species: Bechstein's, Daubenton's, Natterers, serotine and brown long-eared although it is noted that the reliability of the results is poor.
- 4.3 Population data was not available for; Alcaethoe, whiskered, Brandts, Leisler's, noctule, Barbastelle and Nathusius pipistrelle.
- 4.4 Population estimates were given for common and soprano pipistrelle however could not be reliably compared to the results from Harris et al. (1995) as the two species had not been identified as separate species at the time of the survey. Pipistrellus spp. remain the commonest species of bat in the UK despite their decline.
- 4.5 Serotine and barbastelle are considered vulnerable and Leisler's and Nathusius' pipistrelle, near threatened in Britain and England in the Red List for Britain's Terrestrial Mammals (Mathews and Harrower, 2020).

Regional Status

- 4.6 The north west of England appears to be a stronghold for Whiskered and Brandt's, both of which are reasonably rare in southern England.

Local Status

- 4.7 The North Merseyside Local Biodiversity Action Plan (LBAP) lists eight bat species recognised as being resident in North Merseyside (refer to Appendix 4) as local priority species.

Designated Sites

- 4.8 There are no statutory protected sites designated on the basis of their interest for bats located within the vicinity of the site and which could be adversely affected by the proposed development of the site.

Records Data Search

- 4.9 The data search identified 221 records of bats within approximately 2km of the site including records of common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, *Nyctalus* sp., Natterer's bat, brown long-eared and unidentified bat species. The nearest record to the site were common pipistrelle and soprano pipistrelle bats recorded just to the east of the M57/A506 motorway junction approximately 500m east of the surveyed buildings. The majority of other records provided by Merseyside Biobank pertain to a waste water treatment works located approximately 1.5km south-west of the buildings.
- 4.10 One record of a European Protected Species mitigation licences for bats was identified from the MAGIC database for within 2km of the site. This relates to a common pipistrelle roost located approximately 1.4km south of the site.

Preliminary Roost Assessment

Habitat Assessment

- 4.11 The building complex is located in the south-eastern area of the golf course. The immediate surrounds of the building include amenity grassland to the north-west; scattered trees and plantation woodland to the north-east; hardstanding/ gravel car park and amenity grassland with scattered trees to the south-east; and the car park and scattered trees and scrub to the south-west with the River Alt within 50m beyond this. Habitats in the wider site include grassland, woodland, scattered tree and hedgerow/ scrub habitats associated with the golf course, rough grassland habitats in the south-east of the site which provide good quality foraging habitat for bats.
- 4.12 The River Alt corridor, woodland strips around the golf course and hedgerows provide good links to other habitats in the wider surrounds including extensive areas of riverside grassland to the south of Valley Road and woodland habitats along the railway corridor on the north-western boundary of the site. Movement is, however, likely to be restricted to the east of the site by the M57 motorway.
- 4.13 Overall, habitats within the immediate and wider surrounds of the site are considered of **moderate** to **high** value for foraging and commuting bats. Where suitable habitats are present in close proximity to structures and trees with suitable roosting features, then there is generally an increased use of these as roost sites due to a higher abundance of food and better access to food sources. *The 2020 update survey found the habitats on site to be the same as during the previous survey.*

Buildings

- 4.14 A description of the buildings can be found in Table 2 below and overleaf. Photos of the buildings with annotations showing locations of potential roosting features are provided in Appendix 5.

Table 2: Description of Buildings

Building 1
Description:
A single storey building in current use as a golf course club house, shop and restaurant. The building is of a fairly modern design and is generally in a good state of repair. The walls of the building are clad and it is unknown whether they are solid or have a frame with cladding externally. Earlier wooden wall cladding has been covered in almost all areas of the building by a faux-brick covering. The roof is flat and covered with bitumen felt. There are narrow wooden fascias around the tops of the walls at the eaves of the roof, most of which have been covered in metal sheet cladding. The wooden fascias and wall cladding are still exposed on the north-eastern elevation of the building. There are two levels to the roof; the main lower section and a higher section at the north-eastern end. Both levels of roof have a small stairwell/ services shelters above. The shelter on the primary lower section of roof has wooden wall cladding, wooden fascia and a flat bitumen felted roof, and the other has a PVC clad construction. There is no roof void accessible for survey due to the flat roofs but there may be a narrow cavity between the roof and the internal ceilings. The building adjoins Buildings 2 and 4 at the north-eastern end (see descriptions below).
Roost potential signs:
The building is generally in a good state of repair and the majority of the building has received additional cladding in more recent years, including the faux-brick wall covering and metal fascia covering. There are occasional small gaps where the wall cladding has peeled away from the wall or at the edge of the cladding, such as around doors and windows. The majority of these were checked and are considered unlikely to support bats. Occasionally, there are also small and narrow cavities underneath the metal fascia cladding which are generally very shallow and are likely to be of limited suitability for bats. In one location on the north-western elevation near the south-western end of the building there is one gap that leads into a cavity in the wooden fascia behind the metal covering which is likely to provide sufficient shelter for roosting bats. The stairwell/ services shelter in the central area of the roof has a shed-like construction, clad with wood. There are two holes in the wall cladding which could allow access for bats into wall cavities although these are unlikely to offer highly suitable roosting habitat for bats. Narrow gaps under the fascias of both roof shelters may offer cavities of limited suitability for bats. In summary, a number of features were identified during the building inspection with the vast majority having negligible or very limited potential for roosting bats and a few features with low potential for bats restricted to small areas of the building. In view of the findings of the inspection, the building is considered to be of low suitability for roosting bats. The 2020 update inspection survey found that the building was in the same condition as the 2019 survey. The majority of the potential roosting features identified then are still present. There are three bricks missing on the northern and western elevations that lead into the cavity wall, however, these are located low down on the wall and are open to use by small mammal predators. No signs of bats were present at the time of the survey and there were cobwebs present which would have caught bat droppings had they been present. Therefore, the building is considered to be of low suitability to support roosting bats.
Building 2
Description:
A single storey building, adjoining Building 1 to the west, which is in current use as accommodation. The building was likely built at the same time as Building 1 and has a very similar construction. It differs from Building 1 by having no additional wall and fascia coverings, with the exception of metal fascias covering on the south-eastern elevation. The building has a concrete base and wooden clad

walls. The wooden fascias are exposed on the north-eastern and north-western elevations. The roof is flat and covered in a bitumen felt.

Roost potential signs:

The overall state of repair of the building is reasonable. However, the exposed wooden cladding on the walls and fascia have holes in some locations which provide potential access points for bats into the cavities in the walls, behind fascias and, potentially, into the void between the roof and inner ceilings. There are holes in the walls on the south-western elevation of the building, but these were inhabited by breeding birds (blue tit and great tit) at the time of survey. There are large gaps in the fascias on the north-eastern elevation, which are also likely to be suitable for breeding birds with some evidence of previous occupation recorded (i.e. nesting material).

In view of the findings of the inspection, which recorded small numbers of features with good suitability for roosting bats, the building is considered to be of **moderate** suitability for roosting bats.

The 2020 update inspection survey identified that the gaps previously used by nesting birds had been filled up with expanding foam and some of the gaps in the fascia on the north western elevation had also been filled with expanding foam and were therefore no longer suitable to support either breeding birds or roosting bats. The building is considered to have **moderate** suitability for roosting bats.

Building 3

Description:

A single storey building, adjoining Building 4 to the west, which is in current use for storage and for a generator.

The building is roughly square and was likely built at the same time as Buildings 1 and 2. The building has pale brick walls and the roof is flat, covered in a bitumen felt and has wooden fascias around the eaves. The ceilings of the rooms inside comprise wooden boarding and the walls are solid with exposed brick internally.

Roost potential signs:

The wooden fascias on the buildings are in poor condition and large holes in these provide access into the space between the roof and inner ceilings. There are also access points into the rooms internally through gaps around doors. Gaps are present around the edges of the wooden board ceilings which provide access between the roof space and ceilings. There is also potential for breeding birds to use the cavities in the roof of the building.

In view of the findings of the inspection, the building is considered to be of **moderate** suitability for roosting bats.

The 2020 update inspection survey found the building to be in the same condition as the previous survey and therefore is considered to be of **moderate** suitability for roosting bats.

Building 4

Description:

This building comprises a basic shelter, adjoining Building 1 to the west and Building 3 to the east, which is used for storage.

The building is supported at each end by the adjoining buildings and at each side by open-sided shipping containers. Spaces at the sides of the building are secured by palisade fencing. The roof has a wooden frame and is covered by wooden boarding with bitumen felt on top.

Roost potential signs:

The basic construction of the building provides very few opportunities for bats. Access for bats into the building is possible due to the partially open sides, however, this leaves the internal area of the building light and drafty during the daytime. It is also in regular use which is likely to deter use by roosting bats. Very limited opportunities for roosting bats could be provided by gaps between the main roof and the tops of the shipping containers.

In view of the findings of the inspection, the building is considered to be of **negligible** suitability for roosting bats.

The 2020 update inspection survey found the building to be in the same condition as the previous survey and therefore the building is considered to be of **negligible** suitability for roosting bats.

2019 Presence/ Absence Survey Results

4.15 An overview of dates, times and the results of the surveys are provided below.

Table 3: Overview of 2019 Presence/ Absence Surveys

Date of surveys & survey type	Start & end times and time of Sunset/ sunrise	Structure reference/ location	Equipment used	Weather Conditions
Dusk 17.06.19	Start time: 21.12 End time: 23:12 Sunset time: 21:42	Buildings 1 & 2	Bat box duets and Magenta Bat5 used in conjunction with AnaBat SD1/2, Express and Swift detectors. and a Canon XA-40 infrared camera.	Start Temp: 13.0°C Sunset Temp: 12.4°C Finish Temp: 10.2°C Precipitation: Dry Wind: Light air-Light breeze (BS1-2* falling to 0) Cloud Cover: 5%
Comments (to include # of surveyors used for each visit): Six surveyors were required to cover all suitable potential roosting features identified. The view of Building 1 of the surveyor to the south of the building was partially blocked by a container. A weeping willow obscured the eastern corner of Building 2.				
Dusk 18.06.19	Start time: 21.13 End time: 22:43 Sunset time: 21:43	Building 3	Bat box duets used in conjunction with an AnaBat SD2 and Express detector.	Start Temp: 15.0°C Sunset Temp: 14.0°C Finish Temp: 14.0°C Precipitation: Light rain showers Wind: Calm (BS0*) Cloud Cover: 100%
Comments (to include # of surveyors used for each visit): Two surveyors were required to cover all suitable potential roosting features identified.				
Dawn 12.07.19	Start time: 03.27 End time: 05:12 Sunrise time: 04:57	Buildings 2 & 3	Bat box duets and Magenta Bat5 used in conjunction with AnaBat SD1/2 and Express detectors and a Canon XA-40 infrared camera.	Start Temp: 16.7°C Finish Temp: 14.4°C Precipitation: Dry Wind: Light air-Light breeze (BS1-2*) Cloud Cover: 90% clearing to 0%
Comments (to include # of surveyors used for each visit): Four surveyors were required to cover all suitable potential roosting features identified. The view of the north eastern elevation of Building 2 was obscured by trees and shrubs.				

* BS - Beaufort Scale

Presence/ Absence Survey No.1 (Buildings 1 and 2)

4.16 No evidence of bat emergence was recorded during the dusk survey of Buildings 1 or 2.

4.17 Several noctule bats were detected mainly commuting across the site during the survey of Buildings 1 & 2 with some foraging activity around the car park. Other activity recorded was commuting (predominantly) and foraging activity by common pipistrelle bats, a couple of recordings of a *Myotis* sp. bat (recorded a few minutes apart and likely to be the same bat) and a single recording of a soprano pipistrelle.

Presence/ Absence Survey No. 1 (Building 3)

- 4.18 No evidence of bat emergence was recorded during the dusk survey of Building 3.
- 4.19 Bat activity recorded during the survey of Building 3 was predominantly bats commuting across the site, mainly common pipistrelles with several noctule passes early in the survey and a couple of passes by soprano pipistrelles.

Presence/ Absence Survey No.2 (Buildings 2 and 3)

- 4.20 No evidence of bat emergence or re-entry was recorded by any of the surveyors during the second presence/ absence survey of Buildings 2 and 3.
- 4.21 There was occasional commuting and foraging activity by common pipistrelle throughout the survey with some noctule commuting and foraging activity towards the end of the survey. A couple foraging/ commuting passes by soprano pipistrelles were also detected. There was near constant foraging by common pipistrelles along the tree line to the north west of Building 3 during the first half of the survey, with a maximum of three bats seen at any one time.

2020 Presence/Absence Surveys

- 4.22 An overview of dates, times and the results of the surveys are provided below.

Table 4: Overview of 2020 Presence/ Absence Surveys

Date of surveys & survey type	Start & end times and time of Sunset/ sunrise	Structure reference/ location	Equipment used	Weather Conditions
Dusk 05.08.20	Start time: 20.29 End time: 22.29 Sunset time: 20.59	Buildings 1, 2 & 3	Bat box duets and Magenta Bat4/5 used in conjunction with AnaBat SD1/2 and Express detectors and a Canon XA-40 infrared camera.	Start Temp: 20.4°C Finish Temp: 18.8°C Precipitation: Dry Wind: Light air (BS1*) Cloud Cover: 90%
Comments: Seven surveyors were required to cover all suitable potential roosting features identified. The view of the southern elevation of Building 1 and the north eastern elevation of Building 2 were partially obscured by trees and shrubs.				
Dawn 04.09.20	Start time: 04.28 End time: 06.42 Sunrise time: 06.27	Buildings 2 & 3	Bat box duets and Magenta Bat4 used in conjunction with AnaBat SD1/2 and Express detectors.	Start Temp: 13.8°C Finish Temp: 12.2°C Precipitation: Dry Wind: Light air-Light breeze (BS1-2*) Cloud Cover: Start 50% clouding over to 95% by the end of the survey.
Comments: Four surveyors were required to cover all suitable potential roosting features identified. The view of the north eastern elevation of Building 2 was partially obscured by trees and shrubs.				
Dusk 21.09.20	Start time: 18.41 End time: 20.41 Sunset time: 19.11	Building 2	Bat box duets used in conjunction with AnaBat SD1 and Express detectors and a Canon XA-40 infrared camera.	Start Temp: 17.3°C Finish Temp: 13.7°C Precipitation: Dry Wind: Calm (BS0*) Cloud Cover: 5% clearing to 0%
Comments: Two surveyors were required to cover all suitable potential roosting features identified. The view of the north eastern elevation of Building 2 was partially obscured by trees and shrubs.				

Presence/ Absence Survey No.1 (Buildings 1, 2 and 3)

- 4.23 No evidence of bat emergence or re-entry was recorded by any of the surveyors during the presence/ absence survey of Buildings 2 and 3.
- 4.24 There was occasional commuting and foraging activity by common pipistrelle throughout the survey with some noctule commuting and foraging activity towards the end of the survey. A couple of foraging/ commuting passes by soprano pipistrelles were also detected. There was near constant foraging by common pipistrelles along the tree line to the north west of Building 3 during the first half of the survey, with a maximum of three bats seen at any one time.

Presence/ Absence Survey No.2 (Buildings 2 and 3)

- 4.25 Evidence of bat re-entry was observed at 06:07:2020 by a common pipistrelle on the south western corner of Building 2. No other evidence of bat emergence or re-entry was identified.
- 4.26 No evidence of bat emergence or re-entry was recorded by any of the surveyors during the presence/ absence survey of Building 3.
- 4.27 There was occasional commuting and foraging activity by common pipistrelle throughout the survey with some noctule commuting and foraging activity towards the end of the survey. A couple of foraging/ commuting passes by soprano pipistrelles were also detected. There was near constant foraging by common pipistrelles along the tree line to the north west of Building 3 during the first half of the survey, with a maximum of three bats seen at any one time.

Presence/ Absence Survey No.3 (Building 2)

- 4.28 No evidence of bat emergence or re-entry was recorded by any of the surveyors during the presence/ absence survey of Building 2.
- 4.29 There was occasional commuting and foraging activity by common pipistrelle throughout the survey with some noctule commuting and foraging activity towards the end of the survey. A couple foraging/ commuting passes by soprano pipistrelles were also detected. There was near constant foraging by common pipistrelles along the tree line to the north west of Building 3 during the first half of the survey, with a maximum of three bats seen at any one time.

Summary and Evaluation

- 4.30 The PRA survey assessed different sections of the building complex as having different levels of suitability for roosting bats. Two buildings (Buildings 2 and 3) were assessed as having **moderate** suitability for roosting bats, one building (Building 1) was assessed as having **low** suitability and one building (Building 4) was assessed as having **negligible** suitability for roosting bats when considering the presence of potential roosting features, as noted within Table 2. *The 2020 update survey found the buildings to contain the same level of potential as the 2019 survey.*
- 4.31 Habitats within the immediate and wider surrounds are considered to be of **moderate to high** value for foraging and commuting bats which increases the likelihood of buildings being used by roosting bats. No evidence of recent use by bats was recorded during the inspection, however most of the potential roosting features identified could not be accessed to fully assess the presence/ absence of bats.
- 4.32 The PRA surveys were undertaken by suitably experienced surveyors in line with BCT Guidance.

- 4.33 In line with the guidance, Buildings 1, 2 and 3 were subject to further presence/ absence surveys, to determine if the potential roosting features were being used by bats. No evidence of roosting bats was found during any of the surveys undertaken at the site in 2019. During the surveys completed, commuting and foraging activity was recorded, predominantly by common pipistrelle bats, but also by noctule bats, occasional soprano pipistrelle and a single *Myotis* sp. bat.
- 4.34 The updated presence/absence surveys in 2020 found that there was no evidence of roosting bats in Buildings 1 and 3. A common pipistrelle day roost was identified in Building 2 during the second survey. During the surveys completed, commuting and foraging activity was recorded, predominantly by common pipistrelle bats and occasional soprano pipistrelle and noctule bats.
- 4.35 The presence/ absence surveys were conducted during the optimal survey period for bats and were undertaken by suitably experienced surveyors in line with the BCT Guidance.

5.0 Impacts and Recommendations

Buildings

- 5.1 The results of the PRA surveys identified varying levels of suitability for roosting bats throughout the building complex subject to survey. Building 1 was assessed as having **low** suitability, Buildings 2 and 3 were assessed as having **moderate** suitability and Building 4 was assessed as having **negligible** suitability for roosting bats. Having been assessed as having negligible suitability for roosting bats, no further surveys of Building 4 are required.
- 5.2 The 2019 and 2020 presence/ absence surveys of Buildings 1, 2 and 3 were undertaken in line with BCT Guidance (Collins, 2016) and were completed by experienced Ecologists, during the optimal survey period.
- 5.3 No bat roosting activity was observed in Buildings 1 and 3 during any of the presence/ absence surveys undertaken in 2019 and 2020 and the level of survey undertaken is considered sufficient to provide confidence in the absence of roosting bats.
- 5.4 Therefore, it is considered, that bats are not roosting in Buildings 1 and 3 and there are no apparent implications with regards to roosting bats and the proposed works.
- 5.5 Given that Buildings 1 and 3 have been assessed as having moderate or low potential to support roosting bats, it is recommended that a precautionary approach to building demolition is undertaken. In particular, wall and fascia cladding should be carefully removed under the supervision of a licenced bat ecologist along with the space between the roof and the internal ceilings within Building 3.
- 5.6 No bat roosting activity was observed in Building 2 during the 2019 presence/absence surveys; however, a common pipistrelle day roost was identified in Building 2 during the 2020 update surveys.
- 5.7 Therefore, a Natural England European Protected Species Mitigation Licence (EPSML) will be required to derogate from legal protection afforded to roosting bats.
- 5.8 The works require planning permission and a European Protected Species Mitigation Licence can only be applied for once all planning has been issued. This includes the granting of

Consent or any pre-commencement planning Conditions relating to a protected species that are capable of being discharged being resolved.

- 5.9 Where impacts to roosting bats are unavoidable, a method statement is likely to be required to support a Planning Application to ensure that the proposed activity will not be detrimental to, and will maintain, the favourable conservation of the species concerned (see Section 6.0 below). This will allow the LPA to fulfil its obligations placed upon them under the Conservation of Habitats and Species Regulations 2017 (as amended).

Safeguards and enhancement measures

- 5.10 If at any time a bat/s or evidence of bat/s is/are suspected or found, all works must cease immediately and advice should be sought from either Natural England or the acting consultant. If a bat roost is found then the works would be delayed until such a time that adequate survey data can be obtained that is sufficient to support a Natural England licence that will derogate from legal protection afforded to roosting bats.
- 5.11 As best practice opportunities for bat species should be incorporated within the proposed development, ideally within the new buildings, to ensure that the long-term status of bat species in the local area is maintained and enhanced.
- 5.12 As bats are mobile creatures and can form new roosts at any time, if works are not started within one year of this report then it may be necessary to repeat certain surveys.
- 5.13 If at any time a bat/s or evidence of bat/s is/are suspected or found, all works must cease immediately and advice should be sought from either Natural England or the acting consultant.

Other: Breeding Birds

- 5.14 The building provides suitable nesting opportunities for a range of common and widespread bird species. Breeding activity recorded during the 2019 survey included blue tit (*Cyanistes caeruleus*) and great tit (*Parus major*) nests within the wall cladding of Building 2. A pair of grey wagtail (*Motacilla cinerea*) carrying food for young, which could also be nesting within the building complex, were also frequently recorded around Building 3. Therefore, building demolition/ works should also consider the high probability that nesting birds will be present during the breeding season.
- 5.15 The Wildlife and Countryside Act (WCA) 1981 (as amended) states that all wild birds are protected at all times against killing or injury. Under the WCA, it is an offence to kill, injure or take any wild bird, to take damage or destroy the nest of any wild bird, or to take or destroy the egg of any wild bird. It is good practice to carry out any works outside of the breeding bird season that might affect nests and result in an offence being committed. The breeding bird season is generally considered to be between March to August inclusive.
- 5.16 If suitable breeding bird habitat is affected during the breeding bird season, then an assessment by an ecologist for breeding birds should be undertaken prior to works. If breeding birds are found, it is likely that works will have to be delayed until breeding has ceased.

6.0 Outline Method Statement

- 6.1 The proposed works have the potential to disturb a common pipistrelle day roost that is used by a low number of bats within Building 2.

- 6.2 The works include the refurbishment of the exterior of the building including replacement of the current wooden and brick-effect cladding. There will also be a glazed corridor and lobby extension to the south of the building.
- 6.3 The following sections provide an outline of the measures required to maintain the current status of bat species found present and considered to be affected by the proposed works.
- 6.4 The following method statement is not a replacement for a Natural England European Protected Species Mitigation Licence (EPSML) or Low Impact Class Licence (LICL) which will be required to permit works, once planning approval has been granted by the Local Planning Authority.
- 6.5 The mitigation scheme has been designed to provide a long-term replacement day roost used occasionally for crevice dwelling bats such as pipistrelle species. Enhancement is also proposed at the site for the loss of other potential roosting features.
- 6.6 The works will include the provision of an interim roost prior to disturbance of the existing building, Building 2. An interim bat box shall be installed at the site (on either a suitable tree or building) prior to works commencing to ensure that bat species will not be left without roosting provision at any time.
- 6.1 The works will commence following the installation of the interim bat box and will be completed in a sensitive and controlled manner, as detailed below and overleaf:
- Prior to any works on Building 2, the land owner and any other person/s involved in the demolition process at the site shall ensure that an appropriate Natural England Protected Species Licence/Low Impact Class Licence has been granted and that the Local Planning Authority has approved the mitigation scheme. The owner and any other person/s should ensure that they are familiar with the required works at the site in relation to bat/s.
 - A tool box talk shall be undertaken prior to works to inform site operatives of the presence of bats at the site and the legislation relating to bats; measures that will be used to protect them; good working practices; licensable activities and what to do should a bat be found during the works.
 - Liaison between the works contractor and the bat licensed ecologist shall be conducted to confirm the areas that contain bat roosting potential and which require supervision.
 - The identified roost is considered to be a day roost used occasionally with a status of low conservation significance. Therefore, it is considered that the proposed works shall not impact a breeding roost or a roost used for hibernation. In line with the Bat Mitigation Guidelines, there are no conditions with regards to timing of the works. However, if it is decided that the best course of action is to use a bat Low Impact Class Licence, then there are timing constraints in when these types of licences can be used.
 - The contractor shall provide a safe method of access to enable the bat licensed ecologist or their accredited agent (to be named on the Natural England Licence) to supervise the careful removal (soft demolition) if necessary, of areas of bat roosting potential located at Building 2, in addition to the roost location under the soffit box on the south western corner of the building. These may include: behind timber cladding boards, under the metal soffits, under the brick-effect cladding which may be suitable for roosting bats. Crevices and gaps may also be further inspected with the use of an endoscope.
 - The contractor will carefully remove these features in a controlled and sensitive manner under the direction of the bat licensed ecologist (if necessary) for the works to be undertaken.

- Licensable activities will only be undertaken during suitable weather conditions with no heavy rain/snow/frost or high winds forecast.
- If a bat/s is/are located and appear unwell or is injured then it/they will be captured and taken into care with a suitably experienced local Bat Carer.

- 6.7 The proposed works indicate that the roost itself will not be directly impacted or destroyed. However, the contractor shall ensure that the works do not impair bat access to the roost during or after the works have been undertaken.
- 6.8 The above points shall be incorporated into contractor's method statements.
- 6.9 If there are any changes to the proposed works, the aforementioned outline method statement shall be reviewed, to ensure that legal protection afforded to bats is adhered too.
- 6.10 The method statement would be completed under a Natural England EPSML/LICL and any relevant site visits shall be undertaken by a bat licensed ecologist and/or their named agent accordingly.
- 6.11 No monitoring is proposed in line with the recommendations of The Bat Mitigation guidelines for this type of roost.
- 6.12 On completion of the development, the interim bat box will be checked by a bat licensed ecologist. If no signs of bat use are present then the bat box will be removed from site. If bats or signs of use by bats is identified then this shall be left in situ.
- 6.13 No works will be undertaken at the site until a Natural England (NE) European Protected Species Licence or Low Impact Class Licence is applied for and granted. A licence enables derogation from the Conservation of Habitats and Species Regulations 2017 and permits works that would affect bats or their roosts to proceed.
- 6.14 The mitigation scheme outlined within this report aims to provide a continued ecological functionality of a day roost used on an occasional basis by small numbers (one confirmed) of common pipistrelle.
- 6.15 The method statement has been further reviewed to assess if the proposals will meet the Habitat Regulations 'three tests' and the subsequent granting of the appropriate Natural England Licence.

Purpose Test (Overriding Public Interest) & No Satisfactory Alternative Test

- 6.2 For the site to be redeveloped there is no satisfactory alternative other than to affect the building in which the roost is located, Building 2. The building is considered to be in a poor dilapidated condition. If the building was to be renovated from its current condition, the existing roost and bat species would be affected and a NE protected species licence would be required. Therefore, there are no satisfactory alternatives that long-term would not have an adverse effect on the existing roost.

Favourable Conservation Status Test

- 6.16 The mitigation scheme proposed is considered to be appropriate for the type of roost identified, the common species found using the roost i.e. common pipistrelle and small number of bats (one confirmed). The compensation of one interim bat box as a replacement for the disturbance of the roost, whilst the development is taking place, is a suitable level of compensation without providing over-mitigation at the site.

- 6.17 There will be no impact on long-term roosting for bat species, in particular common pipistrelle, at the site, as the roost will remain in-situ. Thereby maintaining the favourable conservation status of roosting provision for common pipistrelle at the site which has been found to support a day roost used on an occasional basis by low numbers, one confirmed.
- 6.18 The National Planning Policy Framework (NPPF) states that new development should take into account likely effects of pollution on health, living conditions and the natural environment, in particular to 'limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation'. The site is currently in use as a golf club, in particular Building 2 where the roost is located is used as staff accommodation and the adjacent Building 1 is the clubhouse and as such the existing roost is currently subject to a degree of light pollution. Discussions have been undertaken with the lighting contractors for the site and it has been confirmed that the new lobby to be constructed to the west of the roost location will contain Passive Infrared Sensor (PIR) lights, that are controlled by movement and therefore will not be on all night. This level of lighting is not considered to be significantly more than the current lighting levels at the site. The lighting scheme to be used at the site will incorporate provision for bat species and not illuminate the bat roost following current guidance.
- 6.19 In line with NPPF and biodiversity net gain, it is recommended that an enhancement bat box scheme is incorporated into the scheme. The proposals will also provide enhanced habitats including; extensive tree and scrub planting, two lakes, new area woodland and enhancement of out of play areas across wider golf course

7.0 Conclusion

- 7.1 To conclude, this report details the findings of the presence/absence surveys that have been undertaken at this site.
- 7.2 All completed surveys have been undertaken by suitably experienced surveyors at the appropriate time of year and in line with current guidance.
- 7.3 A single common pipistrelle bat was observed to re-enter Building 2 during the second survey in 2020.
- 7.4 No evidence of roosting bats was found for Buildings 1 and 3 during the presence/ absence surveys undertaken at the site. Common pipistrelles were recorded foraging in and around Buildings 1-3 and commuting around the buildings. Soprano pipistrelle and noctule bats were also recorded commuting and foraging around the buildings.
- 7.5 Considering the results of the presence/ absence surveys it is considered that this roost is a day roost used on an occasional basis. The existing confirmed roost will be directly affected by the proposals and there are therefore implications at the site in relation to bats. A Natural England Licence, accompanied by a mitigation scheme, will need to be applied for and granted to legally permit work to commence which would affect bats or their roosts.
- 7.6 As a precautionary measure it is recommended that any areas of bat roost potential in Building 3, in particular, the wall and fascia cladding and the space between the roof and the internal ceilings are carefully removed under the supervision of a licensed bat Ecologist.
- 7.7 In conclusion, the mitigation scheme proposed is considered appropriate to the species and roost identified at the site. The Habitat Regulations 'three tests' are able to be met and a

licence can be practicably be issued Natural England once planning permission has been granted.

- 7.8 It is recommended that an enhancement bat box scheme is incorporated into the scheme and that the enhanced habitats including; extensive tree and scrub planting, two lakes, new area woodland and enhancement of out of play areas across wider golf course are completed and placed under a long-term management plan.

8.0 References

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Figure 1:
Site Location Plan

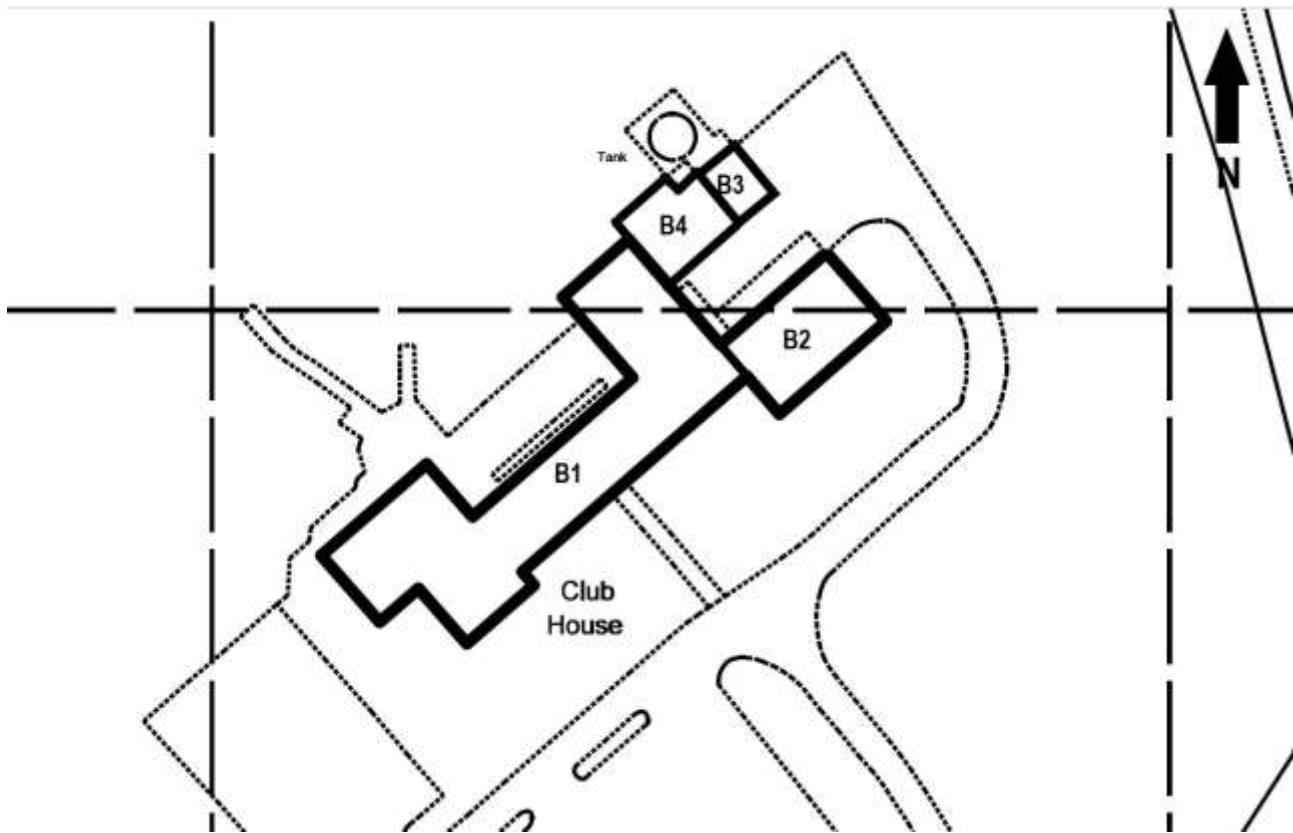


Figure 2:
Development Proposals Plan

ORDNANCE SURVEY LICENCE
REPRODUCED FROM ORDNANCE SURVEY MASTERMAP DIGITAL DATA BY
PERMISSION OF ORDNANCE SURVEYS, ON BEHALF OF HER MAJESTY
STATIONARY OFFICE. © CROWN COPYRIGHT 2019. ALL RIGHTS RESERVED.
ORDNANCE SURVEY 100000000

— SITE BOUNDARY 80.3055 HECTARES
— OTHER LAND IN THE OWNERSHIP OF THE CLIENT

SCALE 1:2500



0m 25 50 75 100 125 150

Diagram illustrating the seven categories of trees and shrubs in the study, each represented by a circular icon with a central dot and a surrounding ring:

- ROOT PROTECTION AREA**: A circle with a dashed red outer ring and a solid red inner ring.
- CATEGORY B TREE**: A circle with a solid blue center and a dashed green outer ring.
- CATEGORY C TREE**: A circle with a solid grey center and a dashed green outer ring.
- CATEGORY U TREE**: A circle with a solid red center and a dashed green outer ring.
- CROWN SPREAD**: A circle with a solid green outer ring and no center dot.
- TREE/SHRUB REMOVED**: A circle with a dashed red outer ring and no center dot.

CLIENT / PROJECT
MAGHULL DEVELOPMENTS LTD
KIRKBY GOLF CLUB - VALLEY ROAD
KIRKBY
DRAWING TITLE
PROPOSED ESTATE PLAN

Site Location	Plant	Product	Quantity
9627	L22	C	

LONDON
15 BEDFORD ROW
LONDON WC1N 3AU
T. 020 7590 6060 E. jonathan@rga.co.uk

Figures 3a-f:
Presence/ Absence Survey Results and Surveyor Location Plan

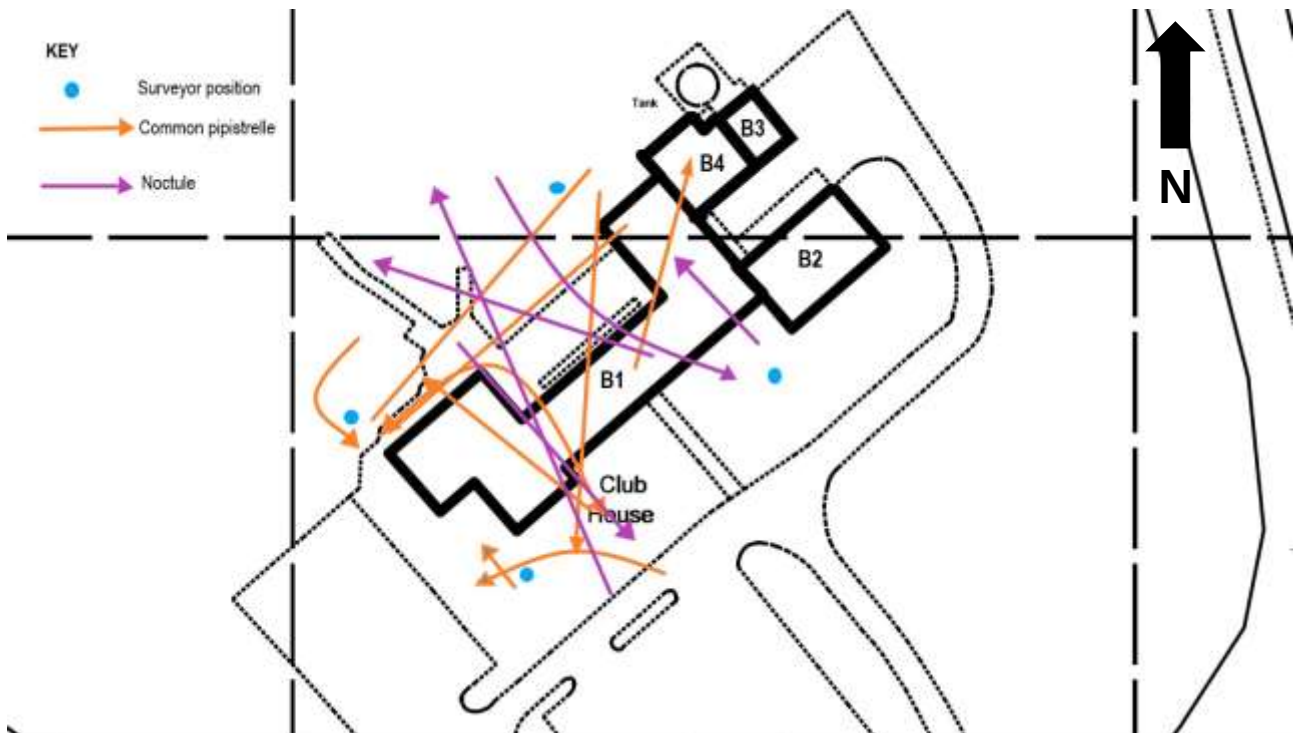


Figure 3a – Presence/ Absence Survey Results Building 1 - 17.06.19

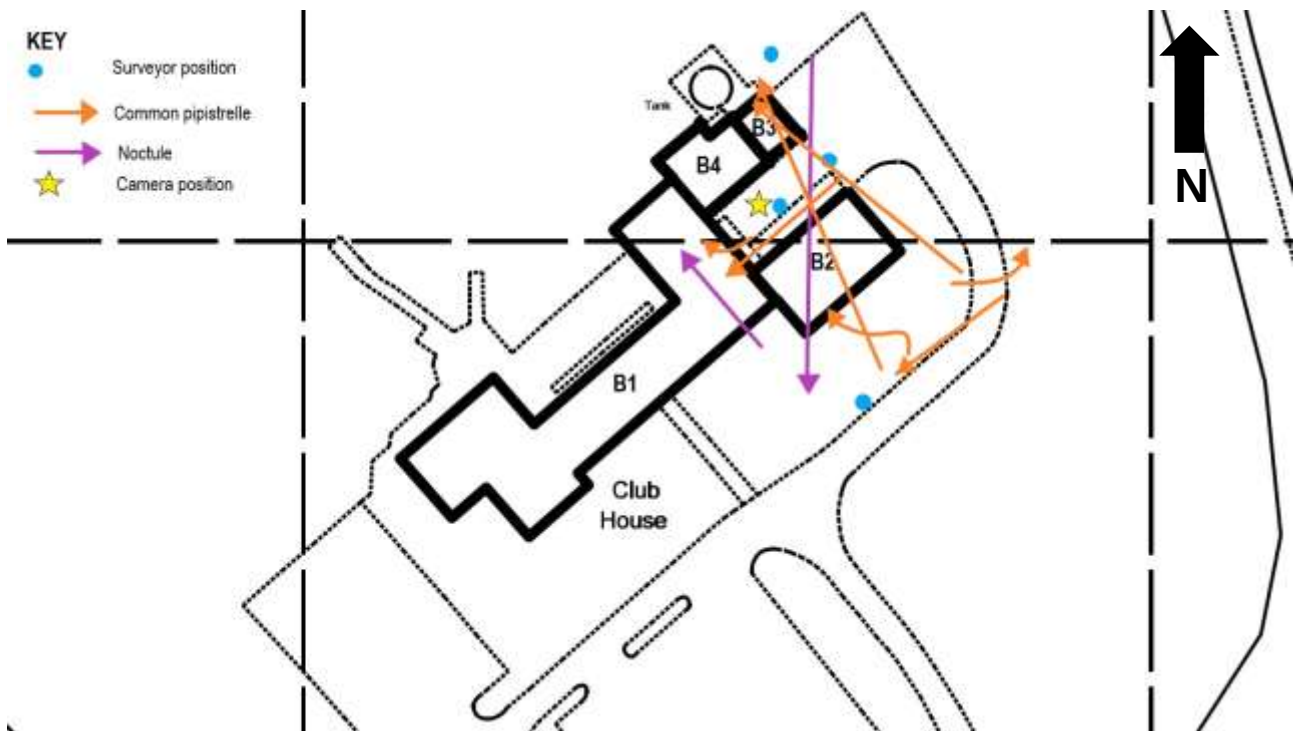


Figure 3b – Presence/ Absence Survey Results Buildings 2 and 3 - 17&18.06.19

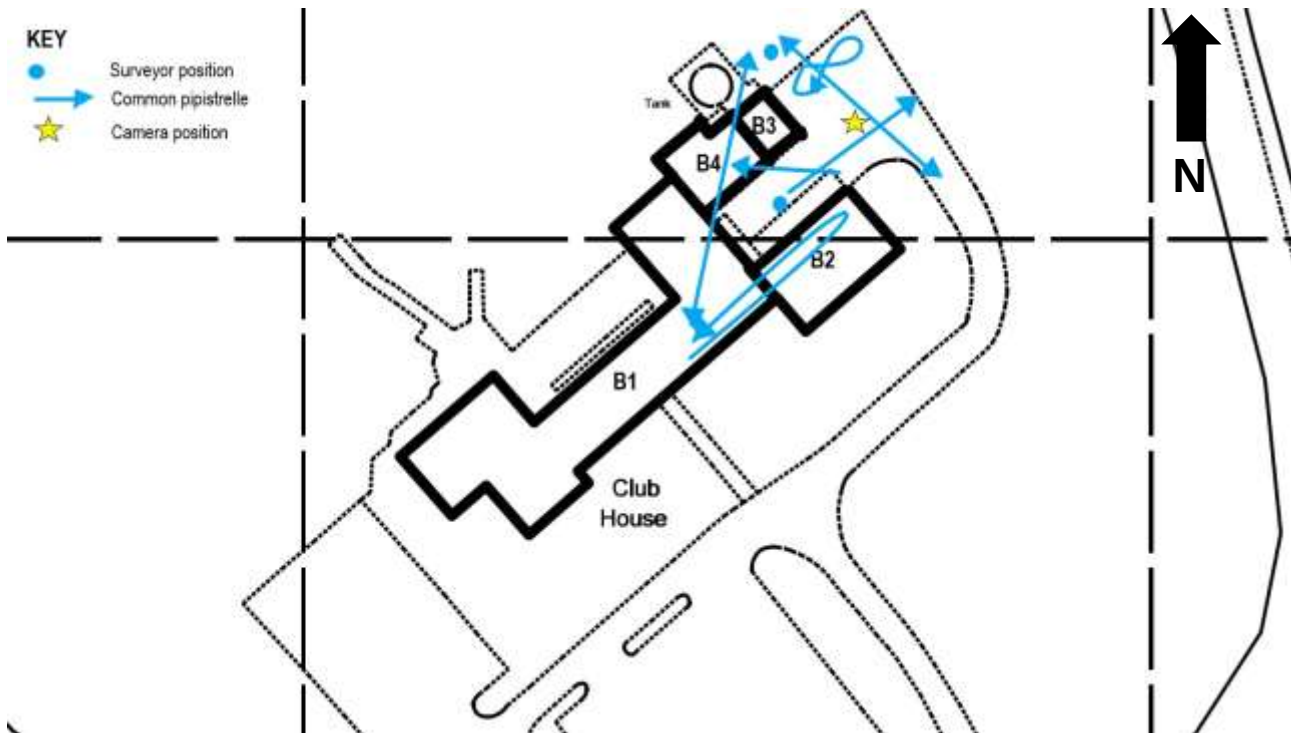


Figure 3c – Presence/ Absence Survey Results Building 3 - 12.07.19

Figure 3d – Presence/Absence Survey Results Buildings 1, 2 and 3 - 05.08.20

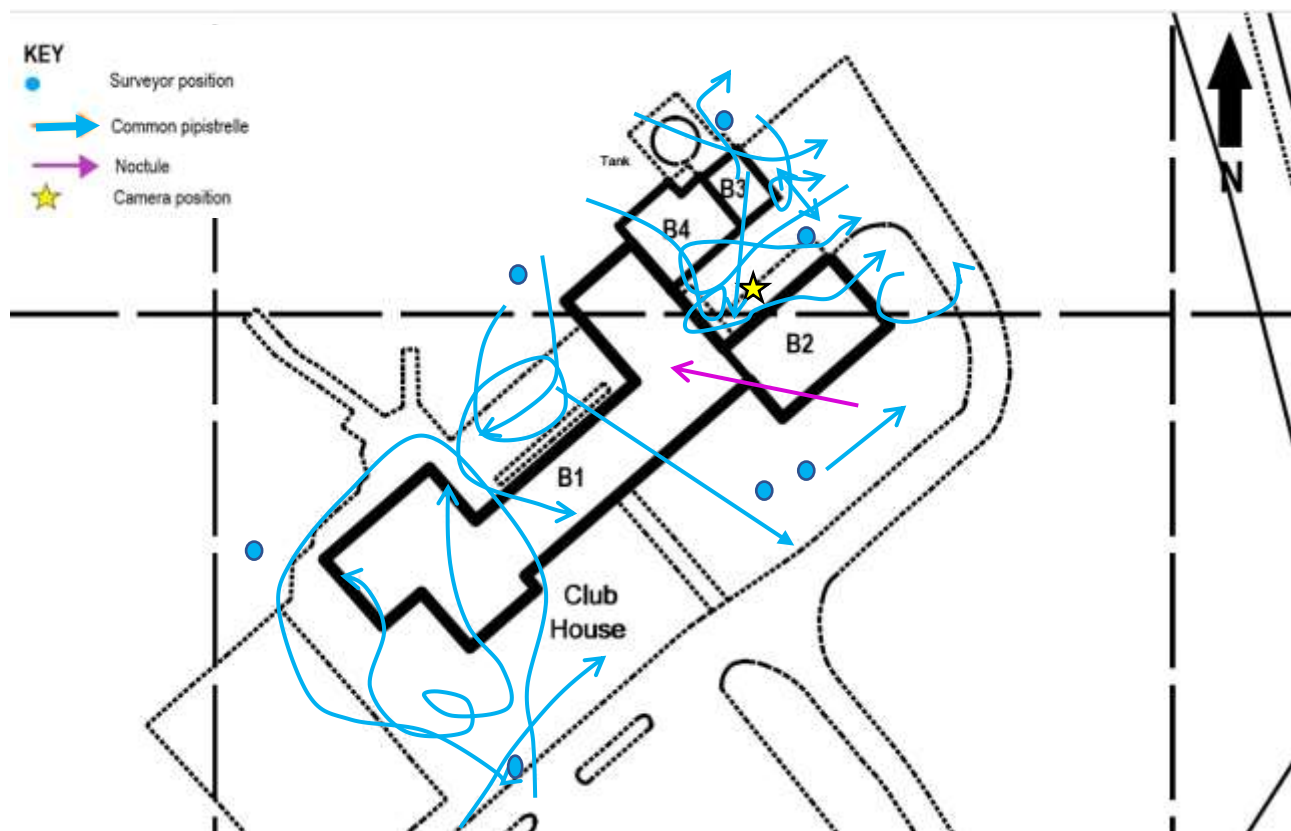


Figure 3e – Presence/Absence Survey Results Buildings 2 and 3 - 04.09.20

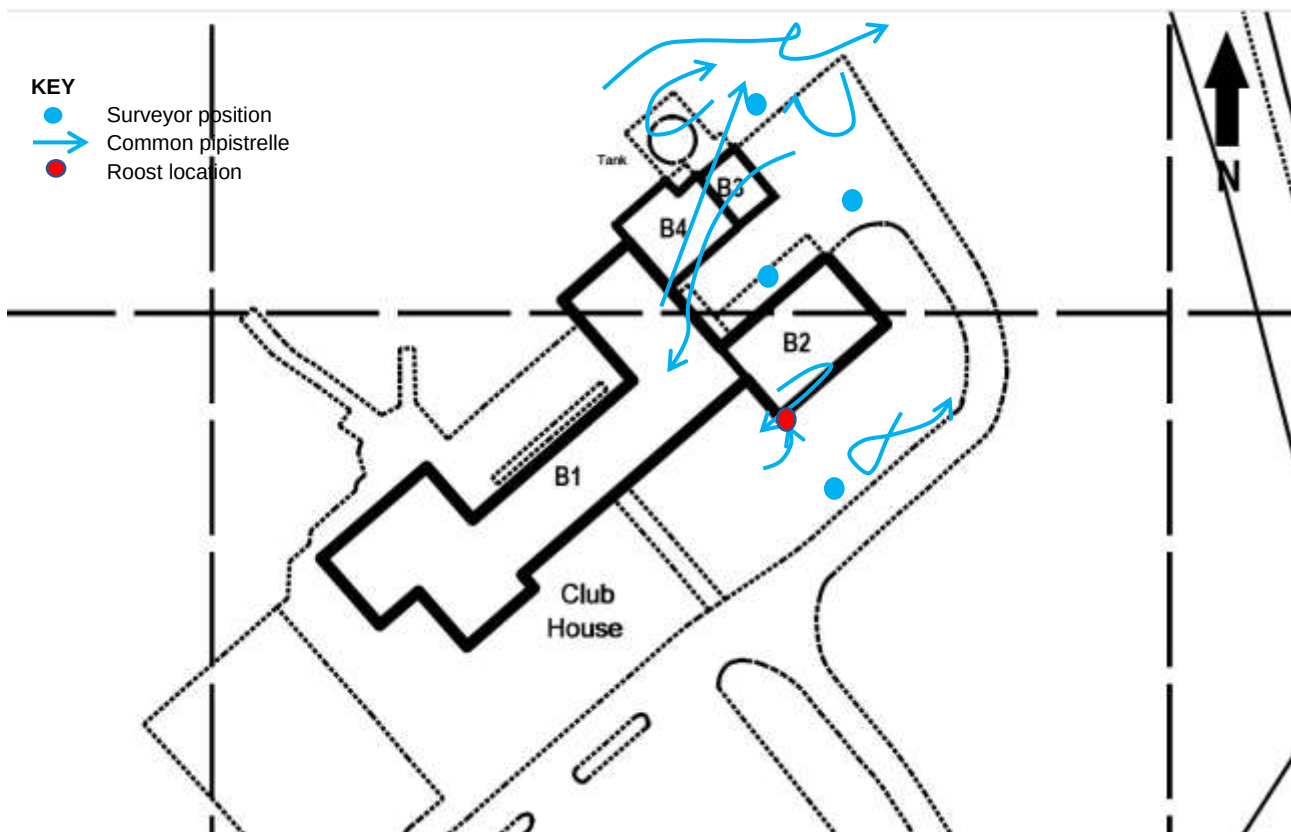
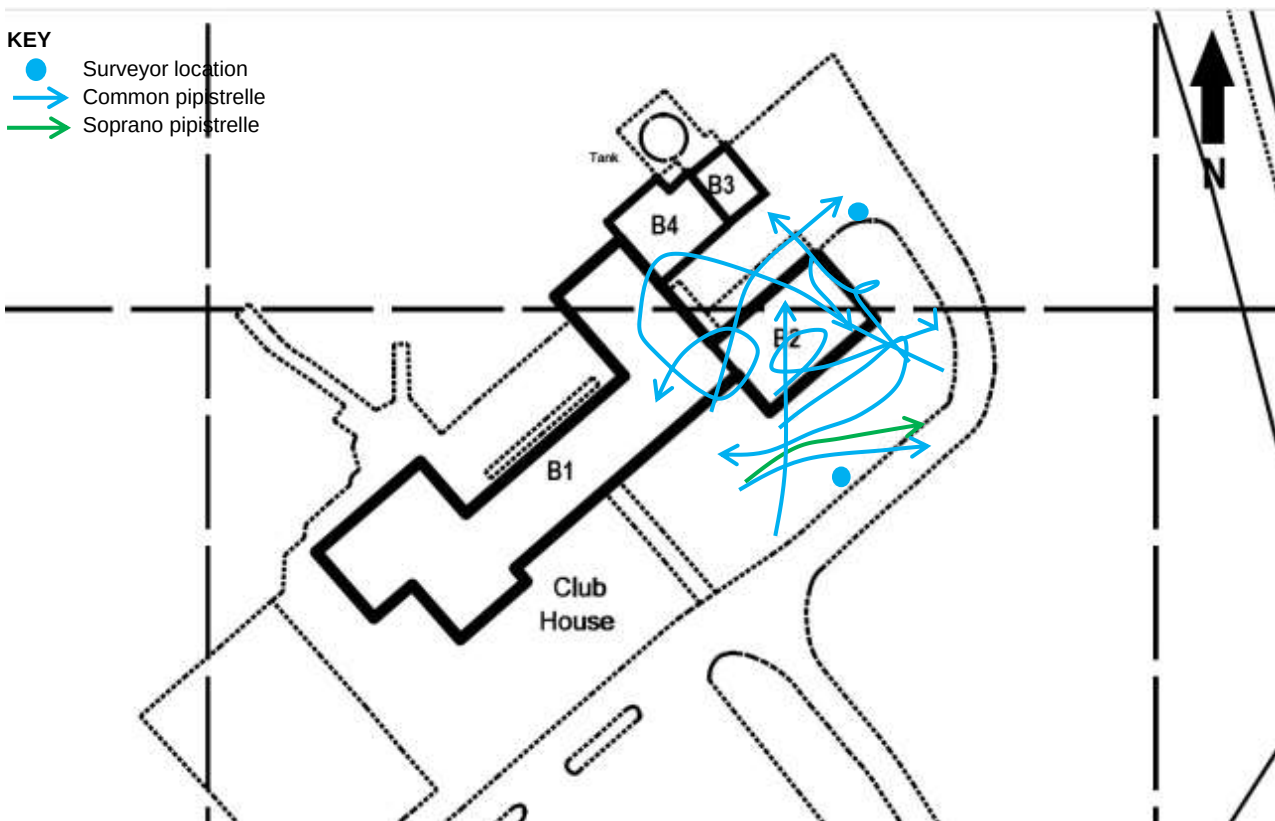


Figure 3f – Presence/Absence Survey Results Building 2 - 21.09.2020



Appendix 1: **Planning Policy and Legislation**

Planning context

National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF, 2021) places a clear responsibility on Local Planning Authorities (LPA) to contribute to conserving and enhancing the natural and local environment. LPAs should promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species (e.g. Species of Principal importance, Biodiversity Action Plan species); and identify and pursue opportunities for securing measurable net gains for biodiversity. The Office of the Deputy Prime Minister (ODPM) Circular 06/2005 provides administrative guidance on the application of the law in relation to planning and nature conservation.

A Local Planning Authority (LPA) has a duty to ensure that protected species and habitats within the UK are a 'material consideration' in the determination of a planning application. Therefore, an LPA is unlikely to determine an application until all relevant information relating to protected species or habitats is submitted to fully inform the application. Relevant information includes adequate surveys and, where required, mitigation strategies, which will need to be submitted in support of a planning application.

Statutory protection afforded UK bats

The Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, also known as the Habitats Directive, lists all UK bat species on Annex IV which places an obligation on all member states to implement strict protection for these species. This legislation is transposed into UK law through the Conservation of Habitats & Species Regulations 2017 (as amended), which makes it an offence to:

- deliberately kill, injure or capture a wild bat;
- deliberately disturb* a bat;
- damage or destroy a breeding site or resting place of a bat.

*Disturbance, as defined by the Conservation of Habitats & Species Regulations 2017 (as amended), is that which is likely to:

- impair their ability –
 - to survive, to breed or reproduce, or to rear or nurture their young; or
 - in the case of animals of a hibernating or migratory species, to hibernate or migrate.
- affect significantly the local distribution or abundance of the species to which they belong.

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 continue the same provision for European protected species, licensing requirements and protected areas after Brexit.

All UK bats and their roosts are afforded further protection through their inclusion on Schedule 5 of the Wildlife & Countryside Act 1981 (as amended), which makes it an offence to:

- intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection;
- intentionally or recklessly obstruct access to a structure or place which a bat uses for shelter or protection.

Four bat species (greater horseshoe, lesser horseshoe, Bechstein's and barbastelle) are listed under Annex II of the EC Habitats Directive which requires member states to designate sites of particularly high importance for the conservation of these species as Special Areas of Conservation (SAC) ('Natura 2000' sites).

When dealing with planning applications where a European Protected Species (EPS) (all UK bats) may be affected, a Local Authority is a 'competent authority' within the meaning of regulation 7 of the Conservation of Habitats & Species Regulations 2017 (as amended). The local authority must therefore exercise their functions under the provisions made within the 2017 Regulations (as amended), and planning decisions should only be made when European Protected Species and their habitats are fully taken into account.

Licensing of works affecting roosting bats

Where a bat roost is likely to be affected by development then a licence to derogate from the legal protection would be required. Licence applications are processed and issued by Natural England and can only be applied for once planning permission (if required) has been granted.

Natural England may grant a licence for the purposes specified in paragraph 55 of the Regulations. The purposes are:

- 55(2)(e) preserving public health or safety or other imperative reason of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment.
- 55(2)(f) preventing the spread of disease.

Natural England must not grant a licence under paragraph 55 unless it is satisfied that:

- 55(9)(a) there is no satisfactory alternative; and
- 55(9)(b) the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable status in their natural range.

Natural Environmental and Rural Communities (NERC) Act 2006

Section 40 of the Natural Environmental and Rural Communities (NERC) Act 2006 places a statutory duty on public authorities, in exercising their functions, to conserve biodiversity in England. Species of Principal Importance for the conservation of biodiversity in England, as identified by the Secretary of State in consultation with Natural England, are listed Section 41 of the NERC Act. The Local Planning Authority and government bodies (e.g. Natural England) will expect the overall design of the development to have regard for the conservation of these species. Section 41 of the NERC Act lists seven bat species as Species of Principal Importance (refer to Section 2).

Appendix 2:**Guidelines for assessing habitat suitability for bats****Table 4.1.** Guidelines for assessing the potential suitability of proposed development sites for bats based on the presence of habitat features within the landscape, to be applied using professional judgement (Taken from the Bat Conservation Trust Bat Surveys for Professional Ecologists: Good Practice Guidelines, 2016).

Suitability	Description	
	Roosting habitats	Commuting & foraging habitats
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.
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 conditions¹ 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 hibernation²). A tree of sufficient size and age to contain potential roosting features but with none seen from the ground or features seen with only very limited roosting potential³.	Habitat that could be used by small numbers of commuting bats such as gappy hedgerow or un-vegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitats. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) of a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ¹ 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).	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 to gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland and water.
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 ¹ 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 broad-leaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
¹For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance. ²Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten <i>et al.</i>, 2015). This phenomenon requires some research in the UK but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in large buildings in highly urbanised environments. ³This system of categorisation aligns with BS8596:2015 Surveying for bats in trees and woodland (BSI, 2015).		

Appendix 3:**Recommended timings and survey effort for presence/absence surveys**

Tables 7.1 & 7.3. Recommended timings and minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).

Low roost suitability	Moderate roost suitability	High roost suitability
<u>Structures</u> One survey visit - one dusk emergence or dawn re-entry survey ¹ . Timing - May to August.	<u>Structures & Trees</u> Two separate survey visits - one dusk emergence and a separate dawn re-entry survey ² . Timing - May to September ³ with at least one of surveys between May and August ² .	<u>Structures & Trees</u> Three separate survey visits - at least one dusk emergence and a separate dawn re-entry survey. The third visit could be either a dusk or dawn ² . Timing - May to September with at least two of surveys between May to August ² .
<u>Trees</u> No further surveys required. Precautionary approach to felling.		
¹Structures that have been categorised as low potential can be problematic and the number of surveys required should be judged on a case-by-case basis. If there is a possibility that quiet calling, late-emerging species may be present then a dawn survey may be more appropriate, providing weather conditions are suitable. In some cases, more than one survey may be needed, particularly where there are several buildings in this category. ²Multiple survey visits should be spread out to sample as much of the recommended survey period as possible; it is recommended that surveys are spaced at least two weeks apart, preferably more, unless there are specific ecological reasons for the surveys to be closer together (for example, a more accurate count of maternity colony is required but it is likely that the colony will soon disperse). If there is potential for a maternity colony then consideration should be given to detectability. A survey on the 31st August followed by a mid-September survey is unlikely to pick up a maternity colony. An ecologist should use their professional judgement to design the most appropriate survey regime. A dawn survey immediately after a dusk one is considered only one visit. ³September surveys are both weather and location dependant. Conditions may become more unsuitable in these months, particularly in more northerly latitudes, which may reduce the length of the survey season.		

Appendix 4:

Population statuses of bats species in North Merseyside

Local Status

Eight bat species are listed as being resident in North Merseyside; these are as follows:

- Common pipistrelle (*Pipistrellus pipistrellus*)
- Soprano pipistrelle (*Pipistrellus pygmaeus*)
- Brown long-eared (*Plecotus auritus*)
- Whiskered (*Myotis mystacinus*)
- Brandt's (*Myotis brandtii*)
- Natterer's (*Myotis nattereri*)
- Daubenton's (*Myotis daubentonii*)
- Noctule (*Nyctalus noctula*)

Nine native species of bat have been recorded in North Merseyside, which include the above list with the addition of Nathusius pipistrelle (*Pipistrellus nathusii*), which have been trapped and ringed at Knowsley Safari Park and identified on bat detectors in some Liverpool parks including Newsham Park.

In addition to this, an individual record of the non-native Savi's Pipistrelle (*Pipistrellus savii*) was recorded which is thought to have arrived in the UK on a ship bound for Liverpool.

Populations of bats in many parts of North Merseyside are comparable in size and importance to some of the best areas in the country and the size and changes are believed to mirror national trends.

Pipistrelle bats occur in all four of the Merseyside districts and are widely distributed in North Merseyside, being the most encountered bats roosting within built structures and foraging in urban areas.

Brown long-eared and noctule are found throughout North Merseyside but are less common.

The distribution of Daubenton's, which feed predominately over water, are localised with records from Sefton, Liverpool and St Helens.

Whiskered/Brandt's and Natterer's are rare locally, with whiskered being recorded in Sefton and St. Helens and Natterer's only recorded in St. Helens so far.

Swarming activity has only been identified in one area in North Merseyside; Rainford of up to seven species (four species of *Myotis*, *Pipistrellus pipistrellus*, *Pipistrellus pygmaeus* and *Plecotus auritus*) (White, Ed.) *et. al.*, 2017).

Appendix 5:
Site Photographs



Photo 1: South-western elevation of Building 1. Where there are gap between cladding.



Photo 2: Centrally located wooden-clad stairwell shelter on Building 1. Arrow shows gap in cladding on the south-western elevation.



Photo 3: North-eastern elevation of Building 1.



Photo 4: South-western elevation of Building 2.



Photo 5: North-eastern elevation of Building 2 (foreground) and south-eastern end of Building 1 (background).



Photo 6: Holes in wooden fascias near the eastern corner of Building 2.



Photo 7: South-western and south-eastern elevations of Building 3.



Photo 8: Showing poor condition of fascias on Building 3.



Photo 9: Internal room within Building 3.



Photo 10: View from north of Building 4.



Photo 11: Internal area of Building 4. Arrow showing cavity between roof and shipping container.



Photo 12: Building 2 (2020) showing the expanding foam on the south eastern and north western elevations.



Photo 13: Building 2 showing the roost location on the south western elevation.