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Inspection & Assessment in relation to Bats & Breeding Birds

July 2023

Rookery Sports Club
Southport
Merseyside
PR9 7HR

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Executive Summary

As part of an ongoing planning application at the Rookery Sports Club (Application Reference Number: **DC/2022/02228**), Tyrer Ecological Consultants Ltd carried out a daytime preliminary roost assessment in relation to bats with an inclusive inspection for breeding birds in in June 2023. The survey was commissioned by Richard Every Architect Ltd; proposals are understood to involve the *"demolition of the existing sports club which was severely damaged by fire with a new purpose-built sports club with four changing rooms to current FA standards".* Detailed methods, findings, conclusions and recommendations are presented throughout the report; however, the reader should be aware of the following **Key** points:

Bats: Based upon the findings of the survey, covered through sections 6.0 – 7.0 of the report and supported by **Appendix I**, the buildings within the boundary of the Rookery Sports Club are determined to offer '**Negligible**' bat roost suitability in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016), no further surveys are required in relation to 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.

Suitability	Description Roosting habitats	Commuting and 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.

Breeding Birds: No impacts are applicable in relation to any Sch.1 (WCA) specially protected bird species such as barn owl, and no further surveys or recommendations are necessary in relation to specially protected birds. In relation to common birds, no evidence of breeding birds was encountered within the surveyed building, with it considered unsuitable for use by urbanised bird species. No further surveys or recommendations are therefore necessary in relation to common bird species.

Biodiversity Enhancement: As a means of enhancement and aiding the design of the scheme in keeping with local and national planning policy considering biodiversity net-gain principles, the proposals may consider incorporating wildlife friendly provisions in addition to those described. Further recommendations, regarding birds, native species and invertebrates are provided within **Appendix II**.

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1.0 Introduction & Reasons for Survey

1.1 As part of an ongoing planning application with Sefton Council at the Rookery Sports Club (Application Reference Number: **DC/2022/02228**), Tyrer Ecological Consultants Ltd carried out a daytime preliminary roost assessment in relation to bats with an inclusive inspection for breeding birds in in June 2023. The survey was commissioned by Richard Every Architect Ltd; proposals are understood to involve the *"demolition of the existing sports club which was severely damaged by fire with a new purpose-built sports club with four changing rooms to current FA standards".* See **Figure 1.1** below for an existing site plan.

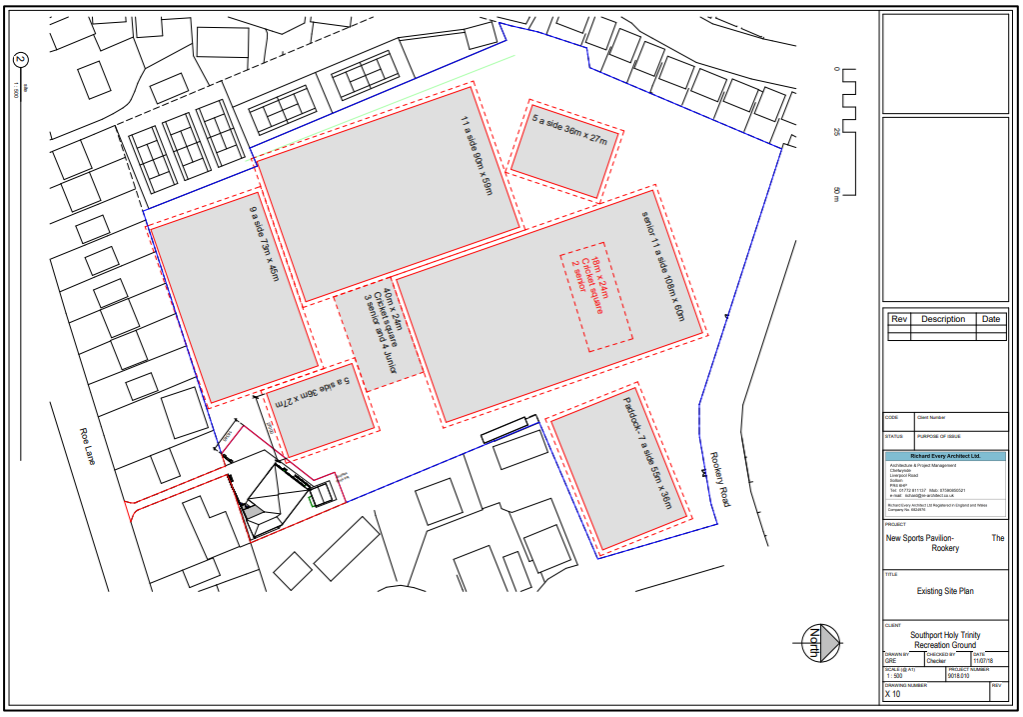

Figure 1.1 – *Existing Site Plan (© Richard Every Architect Ltd)*

1.2 The aim of the survey was to ascertain if any building was of value to bats whilst an assessment for birds was also carried out. If any potential roost features (PRFs) were found to be suitable for bats, or signs of use were observed, then more detailed surveys would be recommended i.e. dusk / dawn emergence / re-entry surveys during the main active season of bats which is May – August (extending into September).

1.3 If additional surveys are required following the initial site visit, this report will outline the details of those further requirements.

1.4 If it was determined that bat(s) or their roost / place of rest / shelter will be subsequently impacted by the works then a European Protected Species Mitigation Licence (EPSML) would be legally required to proceed with the development.

1.5 If evidence indicated breeding birds may be impacted by proposals, tailored recommendations would be made accordingly, species pending.

1.6 As part of the local authority's planning policies and obligations to the Planning Framework, ecological surveys are generally required prior to planning permission being granted where protected / priority habitats and species are, or may be present, that could be affected by the proposals for which the application seeks consent. Where more detailed surveys are recommended by the ecologist, following an initial daytime investigation, then Local Planning

Authorities (LPA), on the advice of their ecological advisors, will not grant permission until such time that all relevant information is gathered.

1.7 In accordance with *Biodiversity Net Gain: Good practice principles for development* (CIEEM *et al*, 2019) the site visit also aims to identify enhancement opportunities for biodiversity in line with national and local planning policy.

2.0 Protected Species & Their Requirements

Bats

2.1 All British bats and their **roosts are afforded full protection under the Wildlife & Countryside Act (1981) (as amended) and are listed in Schedule 2 of the Conservation of Habitats and Species Regulations (2019) (EU Exit). When dealing with cases where a European Protected Species (all UK bats) may be affected, a planning authority is a competent authority within the meaning of Regulation 7 of the Regulations, and therefore has a statutory duty, as the local authority, to have due regard to the provisions of the Regulations in the exercise of its functions.

2.2 Uses of Buildings by Bats

a) Summer breeding roost (May – August)
b) Hibernation roost (October – March)
c) Transitional or temporary roost (other months)

2.3 Roost selection is often closely correlated to suitable foraging habitat within a reasonable commuting distance from the roost and different sites are used depending upon insect densities and abundance; climatic conditions can also affect their ability to successfully forage. All British bats are insectivorous.

*** The term roost is generically referred to as a place that bat/s use for the any of the above reasons, however it should be noted that under the Conservation of Habitats and Species Regulations (2019) (EU Exit) (Regulation 43 (d) the term roost is not used but refers to "a breeding site or resting place of such an animal" and is afforded legal protection. The roost, breeding site or resting place of bats, which ever terminology is used is legally protected whether or not bats are in occupation.*

Birds

2.4 All wild birds, no matter how common, their eggs, young and nests, whilst being built or occupied, are protected under both the Wildlife and Countryside Act (WCA 1981) and Natural Environment and Rural Communities Act (NERC Act 2006). Birds listed on Schedule 1 of the WCA 1981, for example barn owl (*Tyto alba*), are afforded a greater level of protection and are protected also from disturbance.

2.5 Any work that would damage an occupied nest, eggs or young of breeding birds must be avoided; any damage to nests that may occur as a result of the development should be outside of the main breeding bird season (March – August). On occasions nests can become unoccupied during the breeding season but the status of the nest(s) should be determined by a suitably experienced ecologist before any damage takes place.

Policy

2.6 Paragraph 180 of the National Policy Planning Framework (as revised in July 2021) states:

When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and,

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

2.7 Policy NH2 of Sefton's Local Plan (SLP) states:

"Where it has been demonstrated that significant harm cannot be avoided, appropriate mitigation, replacement or other compensatory provision may be required, to accord with the hierarchy of sites" and "*Where significant harm resulting from development cannot be avoided, adequately mitigated, or as a last resort, compensated, then planning permission will be refused."*

2.8 The policy goes on to state:

"Development proposals which affect sites of nature conservation importance, Priority Habitats, legally protected species or Priority Habitats must be supported by an Ecological Appraisal and include details of avoidance, mitigation and/or compensation, and management, where appropriate."

2.9 Where more detailed surveys are recommended by the Ecologist following a daytime assessment, then the Local Planning Authority, upon the advice of their ecological advisors, should not determine an application until such time that all relevant information is gathered, i.e. – until all required survey work has been completed. This is in accordance with the obligations placed upon Local Authorities in the exercise of its functions by way of its duties under the Conservation of Habitats & Species Regulations 2019 (EU Exit).

3.0 Protected Species in Merseyside

3.1 Up to ten bat species have been recorded in Merseyside, most of which use built structures notably occupied residential properties for roosting as well as trees. Bats (*Chiroptera*) feature on the Merseyside BAP and all are fully protected by UK legislation. The most frequently encountered bat species is the common pipistrelle (*Pipistrellus pipistrellus*) and its abundant status in Merseyside is reflected throughout the UK.

3.2 All wild birds (with only minor exceptions) and their nests, whilst being built or containing eggs or dependant young, are protected under the Wildlife & Countryside Act 1981 (as amended). Some species are, however, subject to a greater level of protection, for example barn owl (*Tyto alba*), which are a distinctive, widespread species of protected bird listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended); they are distributed throughout the UK and will use tussock-forming grasslands, rough field margins, ditches and roadside edges for hunting purposes, whilst they typically use barns / abandoned buildings and tree hollows for nesting or roosting use. In rare instances occupied dwellings can support owls. Additional to protection from nest destruction, Schedule 1 listed species are also protected from disturbance.

4.0 Survey Methodology

4.1 As part of the Inspection & Assessment in relation to Bats & Breeding Birds report, a desk-top and field-based study is conducted. Methods for both components of the appraisal are given below.

Desktop Study

4.2 Prior to a site visit a desktop study was conducted using online resources to obtain information pertaining to any sites afforded statutory (e.g. SSSI) and non-statutory (e.g. LWS) designations within 2.0 kilometres of the site boundary. To do so, the Multi Agency Geographic Information for the Countryside (MAGiC – provided by DEFRA) was accessed to gather such information; this particular interactive mapping service was also used to locate any locally granted European Protected Species Mitigation Licenses (EPSMLs) and species records to further inform conclusions concerning such species in the context of the study site and its proposed development.

4.3 Historic satellite imagery was reviewed using sources such as Google Earth (© 2022/23) to help establish past use of the land and determine the nature of adjoining and extending habitats; such information aids in the understanding of how the site might interact with its surroundings ecologically and its value in that context, and how the development may impact at a wider scale.

4.4 A commercial data request to the Local Environment Records Centre serving the area – Merseyside BioBank – has not been sourced and is justified through application of the following recent guidance:

1) The Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK (CIEEM, 2020) states:

"*It is generally expected that a desk study, including a data search, will be a key part of the ecological surveys or reports produced to inform a planning application. Freely available web-based sources of data and contextual information should always be used; in some cases, it may be acceptable to not undertake a data search with the LERC or other relevant NSS or local interest groups, for example:*

*ii) Situations where the **data search would be extremely unlikely to provide information needed to inform the assessment, due to the scale and location of the proposed development**. The appropriateness of excluding a data search will need to be judged on a case-by-case basis as, in most situations, it will be essential to carry out such a search even if the development is very small or is likely to have a low impact. It can be very difficult to demonstrate that a data search would not have provided relevant information without obtaining and reviewing those data.*

*iii) In some cases for Preliminary Roost Assessments of buildings in **low impact / small-scale scenarios**, such as an extension to a residential property, loft conversions (full or partial), installation of Velux/dormer windows, single modern agricultural or **similar building conversion or demolition**; however, it should not be assumed that data searches are never required for such scenarios and this must be judged on a case by case basis and justified accordingly.*

2) The Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) also states:

"Very occasionally it might be possible to carry out a robust PEA without obtaining LERC/NBDC/CEDaR data; this will usually only apply to low impact or small-scale projects

(e.g. by virtue of size, extent, duration of works, magnitude and locality), and should be determined on a case-by-case basis."

4.5 As exemptions as made **bold** above can be applied at the Rookery Sports Club, whilst following best practice, it is considered unnecessary to conduct a commercial data request following the desk study effort and daytime assessment at this time, which offers a proportionate level of survey effort. If, however, a data search is considered necessary by the Local Authority advisory body to inform the ecological impact assessment following any further surveys recommended in this report, a proportionate data search should be commissioned with results interpreted into the conclusions and recommendations of a re-issued / updated report.

Field Survey

4.6 In context with the above, a diurnal inspection and assessment of outbuildings and the immediate environment in relation to bats and breeding birds was conducted on 5th June 2023 in dry, sunny conditions (16ºC), wind 0/12 (Beaufort scale), 20% cloud, by the following surveyor (see **Table 4.1**):

Table 4.1 – Site surveyor credentials

Name	Description of most relevant credentials
Mr. D. Burrows Qualifying CIEEM	• Consultant Ecologist with 3 years of training and experience • Relevant Degree: BSc (hons) Wildlife Conservation; MSc Conservation and Biodiversity • Licensed for Great Crested Newt: CL08 (Great Crested Newt Survey Level 1) – 2022-10604-CL08-GCN. Accredited agent on the Natural England Bat Class 2 Bat Licence of Mrs. K. Wilding

4.7 Bat Conservation Trust (BCT) – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016) states:

"*The guidelines should be interpreted and adapted on a case-by-case basis according to site-specific factors and the professional judgement of an experienced ecologist. Where examples are used in the guidelines, they are descriptive rather than prescriptive."*

4.8 The bat and breeding bird survey was conducted in tandem; the buildings were inspected for potential places that may be of value to bats or breeding birds, and to determine if evidence of use by either group was present. An internal assessment of the building took place with the aid of a high-powered torch for evidence of bat use, which mainly includes bat droppings and / or prey items, or the incidental presence of live or dead animals, and investigated for evidence of breeding birds, which broadly involves a search for nesting materials, presence of pellets or accumulated faeces and / or dead juveniles / hatchlings.

4.9 External elevations were investigated with the aid of a high-powered torch and close focus binoculars (where necessary) for places that can be used as a roost by bats or as a means of ingress for bats and birds leading to areas of roosting/nesting potential. These features are typically referred to as potential roost features (PRF) concerning bats. All external features were able to be surveyed without constraint.

4.10 The surrounding habitat was also considered in terms of general suitability for bat and bird species associated with the local habitat types.

4.11 Criteria for roost assessment are based upon the determinants given in the Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016): (see **Figure 4.1**).

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.

Suitability	Description Roosting habitats	Commuting and 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 conditions[a] 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[b]). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.[c]	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated 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 (not in a parkland situation) or 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[a] 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 gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or 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[a] 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.

[a] For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.
[b] Evidence 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 *et al.*, 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.
[c] This system of categorisation aligns with BS 8596:2015 Surveying for bats in trees and woodland (BSI, 2015).

Figure 4.1 – *BCT guidelines extract*

4.12 An assessment of the building was conducted when birds are outside of their breeding season (this is typically March – August inclusive). Elevations were inspected for evidence of birds that show a high dependency upon built structures, many of which are in a state of decline. These might include the following species for example:

- Starling (*Sturnus vulgaris*): Birds of Conservation Concern (BoCC) red status
- House sparrow (*Passer domesticus*): BoCC red status
- House martin (*Delichon urbica*): BoCC red status
- Swift (*Apus apus*): BoCC red status

4.13 Additional to the site's capacity to support common species of bird, the area was subject to an assessment for capacity to support specially protected bird species.

4.14 The results, conclusions and recommendations are based on a number of factors i.e.

- Practical experience of surveyor,
- Knowledge of bat / bird species relevant to the site location and geographical range,

- Nature of immediate/surrounding habitat in relation to foraging / commuting,
- Condition of the building,
- Presence / absence of a loft space or cellar and reasonable practicality of use,
- Presence / absence of roost potential,
- Value of roost potential – if present.

4.15 The results, conclusions and recommendations of this report have been assessed by Mrs. K. Wilding, the Director of Tyrer Ecological Consultants Ltd, and her assessment is consistent with that of the surveyor and author Mr. Burrows.

5.0 Limitations

5.1 The survey was conducted in June 2023 at a time when bats are within of their active season, with evidence of bats therefore being most apparent in this time period where they are roosting. Survey timing is therefore not considered a constraint in this instance.

5.2 The survey took place within the breeding bird season (typically March – September inclusive) at a time when evidence of breeding birds is most apparent. Survey timing is again not considered a constraint in this instance.

5.3 No significant access limitations were experienced at key areas; therefore, having considered possible survey constraints, no significant limitations were experienced that might adversely influence the results, conclusions, and recommendations of this report.

6.0 Desk Study Results

6.1 The site of the proposed works (referred to in-part as “the application site” and “the site”) is situated to the north of Roe Lane and is located approximately 2.25 kilometres northeast of Southport town centre (see **Figure 6.1** below). The site features two separate buildings utilised as a sport club house with associated infrastructure including carparking; from aerial imagery it is evident that the sites usage remaining consistent over the past 20 years, with no apparent change.

Figure 6.1 – *Location of the application site (red boundary) within the landscape (© Google Earth Pro 2022/23)*

6.2 The immediate habitat (500 metre radial buffer) is distinctly sub-urban in nature, with typical residential infrastructure to the north, west and south of the site in the form of roadways and residential space, many with associated small, highly landscaped gardens as well as linear features such as hedgerows and treelines bordering amenity space; the land directly adjacent to the site boundary is utilised for amenity purposes and is managed as such. Semi natural habitats are present in the immediacy, with pockets of Priority Habitat Inventory (PHI) – deciduous woodland 0.34 kilometres southwest of the application site.

6.3 The extending environment (2.0 kilometre radial buffer) continues in similarity to that of the immediate, with further expanses of residential development in all directions, with a complex of sub-urban infrastructure including commercial premises, educational facilities and amenity fields (inclusive of Hesketh Golf Club to the north). The land beyond the sub-urban reaches to the east contain large, open areas of amenity-managed grassland, as well as further regions of woodland, designated within the PHI layer on MAGiC Maps. Further protected habitats are present in the wider landscape in the form of PHI – wood pasture and parkland associated with Hesketh Park (0.63 kilometres northwest), in addition to semi-improved grassland (non-priority) and lowland dry acid grassland situated within Southport Old Links Golf Course, circa

1.05 kilometres northwest. Coastal and floodplain grazing marsh, sand dunes and coastal saltmarsh (PHI) are positioned beyond 1.14 kilometres north – northwest of the application site.

6.4 Collectively, the immediate and extending networks of semi-natural habitat in the surrounding landscape provide an interconnected opportunity to a variety of protected species groups, despite the presence of a sub-urban residential environment in the immediacy. Bats will find favourable routes for foraging and commuting in the form of treelined roads and part-wooded gardens; the common pipistrelle bat, which is typically associated with roosting in buildings set in sub-urban environments and is the protected species most likely to be encountered. The brown long-eared bat, which is associated with woodland habitat are known to utilise buildings which are close to viable habitat. Garden birds associated with the local area are also highly likely to be in proximity to the site, as well as those commonly linked with urbanisation, such as house sparrow.

NB: *Where quality habitat is present close to buildings then the percentage use of those buildings, by bats, increases given that roost opportunities are available and vice versa.*

Statutory designated sites

6.5 There are three statutory designated sites for nature conservation within 2.0 kilometres of the application site (see **Table 6.1**).

Table 6.1 – Statutory designation types and reasons for designation within 2.0 kilometres buffer

Site name	Designation type	Interest features
Ribble Estuary (1.81 kilometres north-west)	Site of Special Scientific Interest (SSSI) National Nature Reserve (NNR)	The estuary is of international importance for the passage and wintering waterfowl it supports, being a major link in the chain of estuaries down the west coast of Britain used by birds on migration between the breeding grounds in the far north and their wintering grounds further south. Plants such as cord-grass, thrift, sea aster and the brackish water crowfoot (*Ranunculus baudotii)*, a particularly scarce plant in NW England, occur here. Occupying around 50% of the Ribble Estuary, this NNR contains a variety of rare and nationally scarce habitats, including; fringing sand dunes, fens, raised peat bogs and saltmarsh. Uncommon species of flora in the area include three species of orchid; common spotted orchid (*Dactylorhiza fuchsia*), early marsh orchid (*Dactylorhiza incarnata*) and southern marsh orchid (*Dactylorhiza praetermissa*). Notable fauna in the NNR are largely bird species, with the site being of international importance for a number of breeding and migratory Annex I bird species including (but not limited to); common tern (*Sterna hirundo*), bar-tailed godwit (*Limosa lapponica*), golden plover (*Pluvialis apricari*) and Bewick's swan (*Cygnus columbianus bewickii*).
Ribble and Alt Estuaries (1.61 kilometres north-west)	RAMSAR site Special Protection Area (SPA)	A large area including two estuaries which form part of the chain of west coast sites which fringe the Irish Sea. The site is formed by extensive sand and mudflats backed, in the north, by the saltmarsh of the Ribble Estuary and, to the south, the sand dunes of the Sefton Coast. The tidal flats and saltmarsh

		support internationally important populations of waterfowl in winter and the sand dunes support vegetation communities and amphibian populations of international importance. Designation species are natterjack toads (*Bufo calamita)*, winter bird assemblage of international importance and wetland bird species occurring at populations of international importance. The SPA comprises two estuaries, of which the Ribble is by far the larger, together with an extensive area of sandy foreshore along the Sefton Coast, and forms part of the chain of west coast SPAs that fringe the Irish Sea. The site consists of extensive areas of sand and mudflats and, particularly in the Ribble, large areas of saltmarsh. There are also areas of coastal grazing marsh. The intertidal flats are rich in invertebrates on which waders and some wildfowl feed. The site supports internationally important populations of waterbirds in winter, including swans, geese, ducks and waders. It is also of major importance during migration periods, especially for wader populations moving along the west coast of Britain. The larger expanses of saltmarsh and areas of coastal grazing marsh support breeding birds, including large concentrations of gulls and terns. These seabirds feed both offshore and inland, outside the SPA.
Hesketh Golf Links (0.79 kilometres north-west)	Site of Special Scientific Interest (SSSI)	The most northerly site in Britain for the nationally rare sand lizard (*Lacerta agilis*), of which this population is isolated from the main dune population, with the site comprising of mainly fixed 'grey' sand dunes which is their preferred habitat. Along with other dune systems on the Sefton Coast, Hesketh Golf Links is a part of the best example of a calcareous dune system in the NW of England. There is a variety of different habitats; rank grassland containing red fescue (*Festuca rubra*), false oat-grass (*Arrhenatherum elatius*) and velvet bent (*Agrostis canina*), short, herb-rich grassland with ribwort plantain (*Plantago lanceolata*) and a high cover of mosses and lichens at the tops of the dunes, a small number of dune slacks which are dominated by creeping willow (*Salix repens*) and Yorkshire fog (*Holcus lanatus*), and small areas of woodland and scrub which contain patches of gorse (*Ulex europaeus*), broom (*Cytisus scoparius*), sycamores (*Acer pseudoplatanus*) and pines (*Pine sp.*). The variety in habitat types provides ecotones on which reptiles rely upon to maintain body temperature and hide from predators, and bare sand, which is used by the sand lizard for egg laying.

6.7 The application site is situated within the Impact Risk Zone (IRZ) for several coastal / near-coastal Sites of Special Scientific Interest (SSSI), with the closest being Hesketh Golf Links SSSI. Given the distance and low-scale impacts of the application site to each of the stated Statutory Sites (**Table 6.1**), it is unlikely that the proposed development will contribute to operations likely to damage the special interests of the site[12]. Additionally, the IRZ system sets

[1] Hesketh Golf Links: https://designatedsites.naturalengland.org.uk/PDFsForWeb/Consent/1000353.pdf
[2] Ribble Estuary: https://designatedsites.naturalengland.org.uk/PDFsForWeb/Consent/1004299.pdf

the criteria for development whereby a Local Authority (Merseyside Ecological Advisory Service) would be required to consult with Natural England regarding potential risks to the designated site posed by the proposed development. Due to the developments proposition to develop an area of land within sub-urban settlements that already contains buildings used for amenity purposes, only to be replaced by non-residential use buildings, none of the IRZ criteria apply and as such Natural England are unlikely to request a Habitat Regulations Assessment (HRA). Where no impact to SSSI's is predicted however, NE issue the following advice within their standing guidance on SSSI impact zones (NE, 2019):

"*It is important to note that the SSSI IRZs only indicate Natural England's assessment of likely risk to the notified features of SSSIs. Where they indicate such a risk is unlikely, this does not mean that there are no potential impacts on biodiversity or the wider natural environment.*"

Notable species records

6.8 An online search of MAGiC maps revealed that the following European Protected Species Mitigation Licence (EPSML) has been granted within a 2.0 kilometres radius of the application site (see **Table 6.2** below).

Table 6.2 – EPSML data records from MAGiC Maps

Licence Number	Distance from Site	Context (where relevant)
2019-43661-EPS-MIT	1.33 kilometres south	Non-breeding common pipistrelle roost

6.9 Tyrer Ecological Consultants Ltd have previous and ongoing projects involving bats within the 2.0 kilometre area surrounding the application site – as such, the following biological data (see **Table 6.3**) is readily available to the Ecologist from the company database – all data has been previously submitted to the LERC serving the area, which, in this case, is Merseyside BioBank.

Table 6.3 – LERC submitted biological data records collected by Tyrer Ecological Consultants Ltd

Year	Distance from Site	Context (where relevant)
2017	1.26 kilometres south-west	Foraging x1 common pipistrelle
	1.23 kilometres south	Emergence noted by x1 common pipistrelle
2018	0.25 kilometres south-west	Commuting by x1 common pipistrelle
2019	1.22 kilometres south-west	Emergence of x2 common pipistrelles, day roost
2020	0.08 kilometres southeast	Emergence of x1 common pipistrelle, day roost
	1.97 kilometres south-west	Foraging by x1 common pipistrelle
2022	1.17 kilometres southwest	Sporadic social calls by x1 common pipistrelle
	0.59 kilometres southeast	Sporadic commuting and foraging by up x3 common pipistrelle bats
	0.89 kilometres north	Sporadic social calls by x1 common pipistrelle

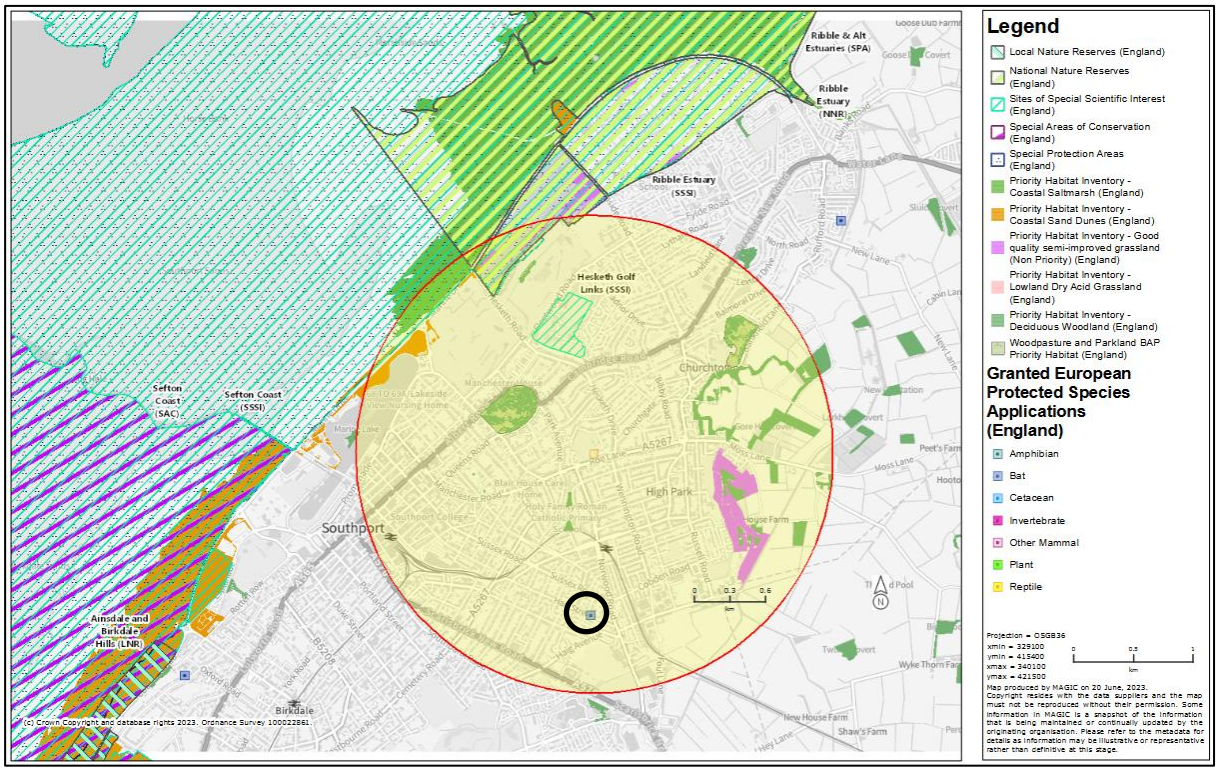

Figure 6.2 – *EPSML, priority habitat and designated site data for the area within 2.0 kilometres of the application site, with granted EPSMLs circled in black (MAGiC Maps 2023)*

7.0 Field Study Results

Bats

7.1 Two buildings were identified within the site boundary (labelled B1 & B2). **Table 7.1** describes the building features in relation to potential suitability for bats and provides a roost suitability assessment in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016); **Figure 7.1** provides a visual aid in relation to the locations of the surveyed buildings.

Figure 7.1 – *Labelled buildings identified within the site boundary subject to a PRA.*

Table 7.1 – Building section descriptions at the application site

B1
B1 is a single storey commercial building of wooden plank and corrugated metal outer construction with a hipped bitumen 1F lined roof. The building features UPVC barge boards, wooden sills with boarded windows in places, and lead flashing on connecting features; including a single storey clay brick constructed lean-to with a flat, timber, bitumen 1F lined roof to the rear of B1. The approximate dimensions of the structure are 16.5 x 16.0 x 5.0 metres (length x width x height). In respect of its condition, the surveyor is not qualified to assess structural state, however the aesthetic condition of the building was adjudged to be poor, due to the deterioration associated with fire damage (**Plates 3, 4, 6 & 8**). Internally, the loft space is divided by several partition walls, restricting the available space within, however is considered to be a cantilevered truss construction. The largest space inspected had internal dimensions of approximately 4.0 x 4.0 x 1.5 metres. On the day of the diurnal assessment all of the surveyed voids where found to be extremely hot, with minor light ingress (restricted to air vents at the eaves) and non-draughty with areas of rockwool insulation; all of the spaces were noted as having a considerable build-up of cobwebs indicating a lack of use by bats (**Plate 1**). Given the nature of the loft voids within B1, in its current condition, it is considered broadly unsuitable for the purposes of breeding loft-dwelling bat species such as brown long-eared (*Plecotus auratus*), which generally prefer dark open spaces that allow for a variation in

internal climatic temperatures, in addition to supporting free flight; which the current cantilevered trussed construction, which creates obstacles, does not provide. Notwithstanding this, the void may provide opportunities other than breeding (transition or day roosts for example), subject to available entry points. During this inspection, no evidence of this species was observed to suggest the presence of this genus.

An exposed bitumastic underfelt is present atop the roof, with wooden boarding beneath; where present, bitumen 1F underfelt or other such lining typically improves a buildings value to bats, notably for crevice-dwelling bats of the *Pipistrellus* genus, whereby the bats roost between crevices between the bitumastic underfelt and the supporting materials beneath provided external access opportunities exist. Conversely, an absence of roof linings can lower a structures value in the same respect. No evidence of such bats was found; however, this is often the case due to the crevice-dwelling nature of these species.

The breeding roosts of Pipistrelle bats are proportionally higher in occupied residential dwellings where the warm, dry conditions favour the requirements of a maternity colony but other structures are also used, especially for hibernation or by male bats which do not need the same conditions as a maternity colony.

Externally, the building was found to have no viable potential roost features (PRFs), with an inspection revealing the bitumen 1F felt and areas of inspected lead flashing to be tight fitting on all aspect; gaps at the wall plate were noted on the southern aspect, behind the UPVC barge boards, which led to the identified loft voids; however, the gaps themselves are between both UPVC and corrugated materials which offer little insulation and provide a smooth surface affording no suitability for bats to land and access the interior.

Despite this access, it was determined that the loft space was unsuitable to support loft dwelling bats due to the constraints listed prior, summarised as a lack of space for free flight and limited opportunities for thermoregulation; with the presence of substantial cobwebbing further indicating a lack of use by loft dwelling bats. The southern elevation was the only aspect that had viable access due to all other faces being obscured by vegetation or garden paraphernalia (**Plate 8**); the northern elevation was found to have flood lighting which is a likely deterrent of bats. Furthermore, the inspection revealed that all other features such as soffits, lintels and the brickwork inclusive of the pointing was tight fitting with no obvious features. Therefore, in considering the unsuitability of the available loft voids, absence of notable PRF's and unsuitability of the surrounding habitats, B1 has been duly categorised as pertaining to '**Negligible**' bat roost suitability in line with current BCT Guidelines.

B2

B2 is a single storey brick-built structure with a pitched bitumen 1F lined roof, wooden barge boards and UPVC facias. The building is of the approximate dimensions 9.0 x 6.5 x 4.0 metres. In respect of its condition, the surveyor is not qualified to assess structural state, however the aesthetic condition of the building was adjudged to be good, due to the general good quality of the various building elements with no significant deterioration (**Plate 9 & 10**).

Internally, no loft void is present due to a vaulted ceiling, exposing trussed timber and painted wooden sarking board (**Plate 11**); a significant amount of light ingress was noted within the structure associated with the uncovered windows. Similar, to **B1** the roof of the building was found to have an external bitumen 1F felt layer.

Externally, the building was found to have no viable PRFs with the bitumen 1F lining appearing to be tight fitting with no apparent overhang of the eaves; furthermore, no gaps are present behind the barge boards with the eaves being well sealed in addition to all pointing being in good condition with no obvious gaps. Therefore, in considering the absence of viable loft voids, lack of any viable PRFs and general unsuitability of the

surrounding habitats, **B2**, has been duly categorised as pertaining to '**Negligible**' bat roost suitability in line with current BCT Guidelines.

7.2 There are no trees within or in close proximity to the site, and as such none were assessed relative to the potential to offer roosting suitability for bats, or for foraging or commuting suitability.

Breeding Birds

7.3 In relation to WCA Schedule 1 specially protected bird species, such as barn owl, no evidence to indicate use of the site by such species or suitability for use was identified, with an absence of suitable habitat for this species within the red line boundary or in the immediate vicinity of the site. Open grassland to the east of the application site would provide more suitable hunting habitat for this species alongside other raptors known to exist in the wider landscape.

7.4 In relation to common bird species, no evidence, historic or recent, of nesting was discovered at the site; however, a number of bird species adapted to urbanisation, such as house sparrow and gull species, were noted utilising the wider landscape. The site itself hosts limited suitability for nesting bird species, restricted to areas of the building in which small birds may utilise the roof or obscure crevices and adjacent scrub associated with the neighbouring properties. See **Figure 7.2** for species observed during the survey.

Table 7.1 – Birds identified during the survey

Species	Scientific Name	Status	Context (where relevant)
House sparrow	*Passer domesticus*	Red	Within neighbouring shrubs
Black headed gull	*Chroicocephalus ridibundus*	Amber	Flying over head
Wood Pigeon	*Columba palumbas*	Amber	Perched on roof of the site
Blackbird	*Turdus merula*	Green	Flying over the site

S.41 - a bird listed on section 41 of the Natural Environment Rural Communities Act 2006 (NERC Act)
LBAP - A local biodiversity action plan listed species
Q - Qualifying species of nearby SSSI site(s)
BoCC - a species of conservation concern, Amber or Red, Red being the highest conservation priority

8.0 Conclusions & Recommendations

Bats

8.1 Based upon the findings of the survey, covered through sections 6.0 – 7.0 of the report and supported by **Appendix I**, the buildings within the boundary of the Rookery Sports Club are determined to offer '**Negligible**' bat roost suitability in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016), no further surveys are required in relation to 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.

Suitability	Description Roosting habitats	Commuting and 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.

Figure 8.1 – *BCT extract on roost suitability criteria*

8.2 Bats are transient species and buildings can deteriorate over time. In the highly unlikely event that bat(s), or evidence of bat(s), are found during proposed works, then as a legal requirement the work at the site should immediately cease and an Ecologist be contacted for further advice. If bat(s) or their roost(s) will be affected, then an EPSML may be required to legally commence with the works. See **Figure 8.2** for indicative evidence of bats.

Figure 8.2 – *Evidence of bats – droppings on the left / a Common Pipistrelle bat on the right – indicative*

8.3 Installation of overly harsh artificial lighting as part of any development that exceeds current levels may have a negative impact upon foraging / commuting bats in the landscape, subject to their presence, particularly if increased light spillage occurs in areas of that are currently free from illumination. A bat-sensitive lighting plan is therefore recommended in order to avoid potential impacts to bats that may use the surrounding treelines. Several options to consider have been listed below, though the reader is referred to the Bat Conservation Lighting Guidelines for further information.

Appropriate luminaire specifications: Luminaires come in a myriad of different styles, applications and specifications which a lighting professional can help to select. The following should be considered when choosing luminaires.

All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used. LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability. Lighting should be directed to where it is needed, and light spillage avoided. This can be achieved by the design of the luminaire and by using accessories such as hoods, cowls, louvres and shields to direct the light to the intended area only. Planting can also be used as a barrier or manmade features that are required within the build can be positioned so as to form a barrier.

Predicting where the light cone and light spill will occur: There are lighting design computer programs that are widely in use which produce an image of the site in question, showing how the area will be affected by light spill when all the factors of the lighting components listed above are taken into consideration. This should be a useful tool to inform the mitigation process.

Light levels: The light should be as low as guidelines permit. If lighting is not needed in any particular area, do not light. Numerous software programmes are currently available which can be used inform lighting plans, demonstrating how lighting decisions will illuminate a site.

Please refer to the 'Landscape and urban design for bats and biodiversity' (*Gunnell et. al.*, 2012, Bat Conservation Trust) Guidance Note 8 'Bats and Artificial Lighting' 2018, Bat Conservation Trust for further information.

8.4 No recommendations are necessary in relation to bats and trees, with no trees within the boundary of the site. If any trees are set to be planted as a part of the landscaping proposals, they should be constituted of native species, with suitable individuals shown in **Appendix II**.

Breeding Birds

8.5 No impacts are applicable in relation to any Sch.1 (WCA) specially protected bird species such as barn owl and no further surveys or recommendations are necessary in relation to specially protected birds.

8.6 In relation to common birds, no evidence of breeding birds was encountered within the surveyed buildings, with the site considered unsuitable for use by urbanised bird species. No further surveys or recommendations are therefore necessary in relation to common bird species.

Biodiversity Enhancement

8.7 As a means of enhancement and aiding the design of the scheme in keeping with local and national planning policy considering biodiversity net-gain principles, the proposals may consider incorporating wildlife friendly provisions in addition to those described. Further recommendations, regarding birds, native species and invertebrates are provided within **Appendix II**.

9.0 Bibliography

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Appendix I: Site Photographs

Plate 1 – *The general character of the internal voids of B1*

Plate 2 – *Additional aspect showing the internal void of B1*

Plate 3 – *General character of the western (front) of B1*

Plate 4 – *General character of the eastern elevation of B1*

Plate 5 – *General character of the gap behind the barge boards at the wall plate level; note the floodlight*

Plate 6 – *Additional perspective (south eastern) of B1 showing the annex brick built building*

Plate 7 – *General character of the bitumen 1F lining on the roof of B1*

Plate 8 – *northern aspect of B1; note the garden paraphernalia*

Plate 9 – *General character of the southern aspect of B2*

Plate 10 – *General character of the northern aspect of B2*

Plate 11 – *Internal character of B2*

Appendix II: Biodiversity Enhancement: General Recommendations

Breeding Bids - House Sparrow

The Sparrow Terrace has been designed to help redress the balance of falling House Sparrow numbers. The current UK population is now half of what it previously was in 1980 and this is widely attributed to habitat destruction and lack of suitable nesting spaces. House Sparrows are social birds and like to nest in company, therefore, this terrace provides ideal nesting opportunities for three families. The terrace can be fixed on to the surface of a suitable wall or incorporated into the wall. It is suitable for all types of buildings.

Breeding Birds - Other

This traditional design has proved to be highly effective in attracting Robins, as well as other small species such as Black Redstart, Spotted Flycatcher and Wren. It is designed to be installed on the walls of houses, barns, garden sheds or other buildings and should be hung so that the entrance is to one side (at an angle of 90° to the wall). The front panel can be easily removed for cleaning.

This type of box should not be made conspicuous on a tree or bush because small predators can enter through the unprotected opening. By hanging on a wall, predators won't be able to reach the box. Alternatively hide the box in Ivy, Honeysuckle or other climbing plants.

Breeding Birds - Starling

Starling populations have declined dramatically in recent years and are now on the Red List of birds of high conservation concern. Loss of habitat is one of the major pressures on this species and household renovations and new buildings offer much fewer nesting sites than have previously been available. Providing these birds with a safe and secure habitat and nesting environment is a great way to help ensure their future survival.

This Vivara Pro WoodStone® Starling Nest Box has a 45mm diameter entrance hole which makes it ideal for starlings. It should be sited on an external wall or tree at a height of at least 1.5m using an aluminium nail or screw and wall plug (not included). Site near to vegetation if possible as this will provide additional protection and cover.

Invertebrates - Bee bricks

The Bee Brick can be used in place of a standard brick or block in construction to create habitat for solitary bees. Alternatively, it can be used as a standalone bee house in your garden or wild patch. It will provide much needed nesting space for solitary bee species such as red mason bees and leafcutter bees, both of which are non-aggressive.

Each Bee Brick contains cavities in which solitary bees can lay their eggs before sealing the entrance with mud and chewed-up vegetation. The offspring will emerge the following spring and the cycle will begin again. Each cavity goes part way into the brick, which is solid at the back. Bee Bricks should be placed in a warm sunny spot on a south-facing wall at a minimum height of 1m, with no vegetation obstructing the holes. It is highly recommended that bee-friendly plants should be located nearby so that the bees using the bricks have food, otherwise it is unlikely that the brick will be used.

Available in a choice of four colours: white grey, dark grey, yellow and red.

Specification
* Material: Concrete
* Origin: Cornwall, UK
* Dimensions: W 215mm x D 105mm x H 65mm
* Weight: 2.9kg
* Colours: White grey, yellow, dark grey and red

Native Planting and/or Landscaping

New feature landscaping should incorporate native woody plants as opposed to non-native species that are of significantly less benefit to biodiversity. Species such as Blackthorn (*Prunus spinosa*), Honeysuckle (*Lonicera periclymenum*), Rowan (*Sorbus aucuparia*), Guelder-rose (*Vibernum opulus*) and Hawthorn (*Crataegus monogyna*) are native and will provide a valuable resource for a myriad of wildlife as opposed to non-native, exotic species which are generally much less effective, particularly to pollinator groups including bees, butterflies and moths.

Suitable Trees	Suitable Woody Shrubs
English Oak (*Quercus robur*)	Hawthorn (*Crataegus monogyna*)
Rowan (*Sorbus aucuparia*)	Honeysuckle (*Lonicera periclymenum*)
Wild Service Tree (*Sorbus torminialis)*	Guelder Rose (*Vibernum opulus*)
Silver Birch (*Betula pendula*)	Elder (*Sambucus nigra*)
Ash (*Fraxinus excelsior*)	Wild Privet (*Ligustrum vulgare*)
Goat Willow (*Salix capraea*)	Blackthorn (*Prunus spinosa*)
Beech (*Fagus sylvatica*)	
Wild Cherry (*Prunus avium*)	