

Land adjacent to 91A North Park Drive Blackpool FY3 8NH

## **ECOLOGICAL SURVEY AND ASSESSMENT**

February 2021

[ERAP (Consultant Ecologists) Ltd ref: 2021-022]

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## Document Control

Survey Type:	Surveyors <sup>1</sup>	Survey Date(s)
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## SUMMARY

### Introduction and Scope

- i. This ecological survey and assessment presents the ecological, biodiversity and nature conservation status of Land adjacent to 91A North Park Drive, Blackpool FY3 8NH. The assessment was requested in connection with proposals to construct a single residential dwelling at the site.
- ii. This report presents the results of a desktop study and an extended Phase 1 Habitat Survey carried out in February 2021. The scope of survey undertaken is appropriate to identify potential ecological constraints, the remit of mitigation required and opportunities for biodiversity associated with the development proposals.
- iii. The site comprises amenity grassland, ornamental planting, a non-native species poor hedgerow, broadleaved trees, young trees and shrubs and hard standing.

### Results of Survey and Assessment

- iv. The proposals will have no adverse effect on statutory or non-statutory designated sites for nature conservation.
- v. No Priority Habitats are present within the site. The site contains only common and widespread plant species. None of the habitats within the site are of significant interest in terms of their plant species composition. None of the habitats present are representative of semi-natural habitat. The NVC communities present are typical of the geographical area and conditions present. The trees at the western and northern site boundary are of site value; the development proposes to retain and protect the trees and provides an opportunity to secure the enhancement and management of this habitat.
- vi. Entire-leaved Cotoneaster (*Cotoneaster integrifolius*), an invasive species listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended), was detected within the site. It is an offence to cause the spread of these species in the wild; guidance on the control and management of this species is described in the report (**Section 5.3**).
- vii. No protected species have been detected.

### Recommendations

- viii. The recommendations in **Section 5.0** outline all the mandatory measures and additional actions to be applied to ensure compliance with wildlife legislation, the National Planning Policy Framework (NPPF) and best practice.
- ix. The proposals will secure an opportunity to implement beneficial measures such as habitat enhancement that will safeguard habitats for wildlife such as birds and bats.

### Conclusion

- x. It is concluded that the proposals are feasible and acceptable in accordance with ecological considerations and relevant planning policy. Development at the site will provide an opportunity to secure ecological enhancement for wildlife associated with residential development.

## 1.0 INTRODUCTION

### 1.1 Background and Rationale

- 1.1.1 ERAP (Consultant Ecologists) Ltd was commissioned by Mrs D Weigh to carry out an ecological assessment of the Land adjacent to 91A North Park Drive, Blackpool FY3 8NH (hereafter referred to as the 'site'). The Ordnance Survey (OS) grid reference at the centre of the site is SD 32994 36546. An aerial image of the site and its surrounding habitats is appended at **Figure 1** (Source image: Google Maps).
- 1.1.2 The assessment was requested in connection with a planning application to construct a single residential dwelling.

### 1.2 Scope of Works

- 1.2.1 The scope of ecological works undertaken in February 2021 comprised:
- A desktop study for known ecological information at the site and the local area;
  - An Extended Phase 1 Habitat Survey and assessment;
  - Assessment of the ecological value of the habitats within the site with the use of the National Vegetation Classification (NVC) and the Ratcliffe criteria, as presented in *A Nature Conservation Review* (Ratcliffe, 1977);
  - Survey and assessment of all habitats for relevant statutorily protected species<sup>1</sup> and other wildlife including badger (*Meles meles*), bird species, and reptiles;
  - A preliminary daylight bat survey of the trees;
  - The identification of any potential ecological constraints on the proposals and the specification of the scope of mitigation and ecological enhancement required in accordance with wildlife legislation, planning policy guidance and other relevant guidance; and
  - The identification of any further surveys or precautionary actions that may be required prior to the commencement of any development activities.

## 2.0 METHOD OF SURVEY

### 2.1 Desktop Study

- 2.1.1 The following sources of information and ecological records were consulted:
- MAGiC: A web-based interactive map which brings together geographic information on key environmental schemes and designations, including details of statutory nature conservation sites; and
  - Lancashire Biodiversity Action Plan (BAP).
- 2.1.2 In accordance with *Guidelines for Accessing and Using Biodiversity Data* (CIEEM, 2016), the proposals at the site are small scale and will be of limited impact upon the site and local area, and it is considered that the purchase of ecological records (as provided by Lancashire Environment Record Network) is not required in this instance.

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<sup>1</sup> In accordance with *Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact on the Planning System* (Ministry of Housing, Communities & Local Government, 2005) developers should not be required to undertake surveys for protected species unless there is reasonable likelihood of the species being present and affected by the development. In this instance (for example) there are no ditches or watercourses within or in proximity to the site; there has therefore been no requirement to consider water vole (*Arvicola amphibius*) or otter (*Lutra lutra*) as part of this assessment.

## 2.2 Vegetation and Habitats

- 2.2.1 An Extended Phase 1 Habitat Survey of the site was carried out by Luke Atherton B.Sc. (Hons) M.Sc. on 1<sup>st</sup> February 2021. The weather was dry with sunny intervals, calm (Beaufort scale 0) and 1°C at 9am rising to 7°C in the afternoon.
- 2.2.2 A habitat and vegetation map was produced for the site and the immediate surrounding area at a scale of 1:300 (refer to **Figure 2**). The mapping is based on the Joint Nature Conservation Committee Phase 1 Habitat Survey methodology (JNCC, 2010) with minor adjustments to illustrate and examine the habitats with greater precision.
- 2.2.3 On site habitat mapping was assisted via use of GPS technology and QField on-site mapping software, using *Proposed Site Layout Drawing Number PR-01* (Stephen Tortely Architect, 2021) as base plans.
- 2.2.4 The plant species within the site boundary were determined with estimates of the distribution, ground cover, abundance and constancy of individual species. The estimation of abundance was based on the DAFOR system, where D = Dominant, A = Abundant, F = Frequent, O = Occasional and R = Rare, this being a widely used and accepted system employed by ecological surveyors. The terms L = Locally and V = Very were additionally used to describe the plant species distributions with greater precision.
- 2.2.5 Stands of vegetation and habitats were described and evaluated using the National Vegetation Classification (NVC). The NVC provides a systematic and comprehensive analysis of British vegetation and is a reliable framework for nature conservation and land-use planning.
- 2.2.6 Searches were made for uncommon, rare and statutorily protected plant species, those species listed as protected in the *Wildlife and Countryside Act 1981* (as amended) and species which are indicators of important and uncommon plant communities. Plant nomenclature follows *New Flora of the British Isles 3<sup>rd</sup> Edition* (Stace, 2010).
- 2.2.7 Searches were carried out for the presence of invasive species, including those listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended), including Japanese Knotweed (*Fallopia japonica*), Indian Balsam (*Impatiens glandulifera*) and Giant Hogweed (*Heracleum mantegazzianum*).

## 2.3 Animal Life

### Badger

- 2.3.1 The survey area for badger covered the site (as annotated on **Figure 1**). Private gardens / land were excluded from the survey.
- 2.3.2 The survey was conducted in accordance with guidance presented within *Badgers and Development* (Natural England, 2007) and *Badgers: surveys and mitigation for development projects* (Natural England, 2015).
- 2.3.3 The following signs of badger activity were searched for:
- a. Setts entrances, e.g. entrances that are normally 25 to 35cm in diameter and shaped like a 'D' on its side;
  - b. Large spoil heaps outside sett entrances;
  - c. Bedding outside sett entrances;
  - d. Badger footprints;
  - e. Badger paths;
  - f. Latrines;
  - g. Badger hairs on fences or bushes;

- h. Scratching posts; and
- i. Signs of digging for food.

2.3.4 Habitats within and surrounding the site were assessed in terms of their suitability for use by foraging and sheltering badger in accordance with their known habitat preferences as detailed in current guidance and *Badger* (Roper, 2010).

### Bat Species

#### Roosting Bats: Trees

2.3.5 A preliminary assessment of the trees within the site was conducted to assess their suitability for use by roosting bats, and to inform whether further surveys or precautionary measures were required.

2.3.6 Trees were assessed from the ground using binoculars and a high-powered torch. Each tree was searched for the presence of the following features:

*Woodpecker holes, rot holes, hazard beams, other vertical or horizontal cracks or splits in stems and branches, partially decayed platey bark, knot holes, man-made holes, tear-outs, cankers in which cavities have developed, other hollows or cavities, including butt-rots, double-leaders forming compression forks with included bark, gaps between overlapping stems or branches, partially detached Ivy (Hedera helix) with stem diameters in excess of 50mm and bat, bird or dormouse (Muscardinus avellanarius) boxes.*

2.3.7 Terms used to describe any features present follow (where possible) those outlined and described in *Bat Tree Habitat Key, 2<sup>nd</sup> Edition* (Andrews, H (ed), 2013) and *Bat Roosts in Trees: A Guide to Identification and Assessment for Tree-care and Ecology Professionals* (BTHK, 2018).

2.3.8 The requirement for further presence / absence surveys at each tree was then considered.

#### Habitat Assessment for Commuting / Foraging Bats

2.3.9 Habitats within and adjacent to the site were assessed for their value and suitability for commuting and foraging bats in accordance with Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*, (Collins, J. (ed), 2016). Reference has been made to the categories and descriptions / examples, presented at **Table 2.1**, below.

**Table 2.1: Consideration of Suitability of Foraging and Commuting Habitat for Bats**

Suitability	Commuting Habitat	Foraging Habitat
Negligible	Negligible habitat features on site likely to be used by commuting bats.	Negligible habitat features on site likely to be used by foraging bats.
Low	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 or patch of scrub.
Moderate	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 linked to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape and is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. Habitats close to and connected to known roosts.	High-quality habitat that is well-connected to the wider landscape and is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Habitats close to and connected to known roosts.

## Bird Species

- 2.3.10 Bird species observed and heard during the survey were recorded.
- 2.3.11 Habitats throughout the site and in the immediate surrounding area were assessed for their value to roosting, feeding and nesting birds, as indicated by the amount of shelter, feeding value, woody vegetation structure and species diversity of tree and shrub species in the site.

## Great Crested Newt

- 2.3.12 In accordance with current Natural England guidance (Natural England, 2020) all ponds within an unobstructed 500 metres of a site should be considered for their suitability to support breeding great crested newts. The potential of the proposed development to impact upon any great crested newt population(s) whose breeding ponds are within 500 metres must be considered.
- 2.3.13 The search of habitats in the wider area up to a distance of 500 metres from the site boundary revealed the presence of one pond and one large waterbody, as detailed in **Table 2.2**, below.

**Table 2.2: Ponds within 500 metres of the Site**

Pond Reference	OS Grid Reference	Distance from Site Boundary	Location (refer to Figure 1)
Pond 1	SD 32868 36364	270 metres south east	Within the golf course, beyond North Park Drive and East Park Drive
Stanley Park Boating Lake	SD 33025 35943	375 metres south	Adjacent to the golf course, beyond North Park Drive and East Park Drive

## Consideration of Requirement for Further Survey

- 2.3.14 The requirement for further survey at each pond was then assessed using the following criteria:
- Presence of dispersal barriers to great crested newt movements between ponds and the site, as detected during the walkover survey;
  - Distance of ponds from the site, and the potential influence of the proposed development of the site on any populations of great crested newt (if present at ponds), using the Natural England rapid risk assessment tool; and
  - Presence of other ponds which may form metapopulations and/or alter the influence of the site on ponds at greater distances.

### *Presence of Dispersal Barriers*

- 2.3.15 Both Pond 1 and Stanley Park Boating Lake lie beyond North Park Drive and East Park Drive, both of which are considered significant barriers to amphibian movements. Additionally the site is well sealed by brick walls and fencing at all boundaries.
- 2.3.16 Due to the presence of significant barriers to dispersal it is considered that no further surveys for amphibian species are necessary.

## Reptile Species

- 2.3.17 The site and its surroundings were assessed in terms of their suitability for use by reptile species using the important characteristics for reptiles outlined in the draft document '*Reptile Mitigation Guidelines*' (Natural England, 2011), and the *Reptile Habitat Management Handbook* (Edgar, et al., 2010). These habitat characteristics are outlined in **Table 2.3**, below.



**Table 2.3: Important Habitat Characteristics for Reptiles**

1. Location (in relation to species range)	7. Connectivity to nearby good quality habitat
2. Vegetation Structure	8. Prey abundance
3. Insolation	9. Refuge opportunity
4. Aspect	10. Hibernation habitat potential
5. Topography	11. Disturbance regime
6. Surface geology	12. Egg-laying site potential

### Other Wildlife

- 2.3.18 Evidence of other wildlife (including Priority Species) observed whilst on site (but for which specific surveys were not made) was recorded and has been included in this report where it is considered of relevance to the planning application.

### 2.4 Survey Limitations

- 2.4.1 The survey was completed when plant species may be in a state of senescence; the surveyor is experienced in identifying plant species from their vegetative characteristics however, and a reliable assessment of the habitats present was possible.
- 2.4.2 All measurements within this report are approximate only, and have been either measured (using QField) or estimated whilst on site or calculated using mapping software (QGIS) or internet-based mapping services such as MAGiC and Google Earth.

### 2.5 Evaluation Methods

- 2.5.1 The habitats, vegetation and animal life were evaluated with reference to standard nature conservation criteria as described in *A Nature Conservation Review* (Ratcliffe, 1977) and *Guidelines for the Selection of Biological SSSIs* (Bainbridge, et al., 2013). These are size (extent), diversity, naturalness, rarity, fragility, typicality, recorded history, position in an ecological or geographical unit, potential value and intrinsic appeal.
- 2.5.2 Habitats have been assessed to determine whether they meet those described in *UK Biodiversity Action Plan: Priority Habitat Descriptions* (Maddock, A (ed), 2008); these lists are used to help draw up the statutory lists of Priority Habitats, as required under Section 41 of the *Natural Environment and Rural Communities (NERC) Act 2006*. Where suitable, the ecological value of the habitats present have been assessed using the terms outlined in *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* (CIEEM, 2018).
- 2.5.3 Government advice on wildlife, as set out in the *National Planning Policy Framework* (Ministry of Housing, Communities and Local Government, 2019) and associated government circulars has been taken into consideration. Legislation relating to protected species, such as those listed under Schedules 1, 5, 6 and 8 of the *Wildlife and Countryside Act 1981* (as amended) and *The Conservation of Habitats and Species Regulations 2017*, is referenced where applicable, and any impacts to protected species are evaluated in accordance with current guidance.
- 2.5.4 The presence of any Priority Species, as listed under Section 41 of the *Natural Environment and Rural Communities (NERC) Act 2006* is noted, and habitats are assessed in terms of their suitability and value for these species. The presence of habitats and/or species listed by the Lancashire BAP Provisional Long List has been taken into account in the evaluation of the site.

## 3.0 SURVEY RESULTS

### 3.1 Desktop Study

#### Designated Sites for Nature Conservation

##### *Statutory Designated Sites for Nature Conservation and SSSI Impact Risk Zones*

- 3.1.1 The site lies within a Site of Special Scientific Interest (SSSI) Impact Risk Zone for Martin Mere Blackpool SSSI, located 1.3 kilometres to the south east. The SSSI Impact Risk Zone requires the Local Planning Authority to consult with Natural England on likely risks from the following development categories (Ordnance Survey, 2021):

*Infrastructure: Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.*

*Wind & Solar Energy: Solar schemes with footprint greater than 0.5ha, all wind turbines.*

*Minerals, Oil & Gas: Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.*

*Rural Non Residential: Large non-residential developments outside existing settlements/urban areas where footprint exceeds 1ha.*

*Rural Residential: Any residential development of 100 or more houses outside existing settlements/urban areas.*

*Air Pollution: Any industrial/agricultural development that could cause air pollution (including: industrial processes, livestock & poultry units with floorspace greater than 500m<sup>2</sup>, slurry lagoons greater than 200m<sup>2</sup> & manure stores greater than 250t).*

*Combustion: General combustion processes greater than 20MW energy input. Including: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.*

*Waste: Landfill. Including: inert landfill, non-hazardous landfill, hazardous landfill.*

*Composting: Any composting proposal with more than 75000 tonnes maximum annual operational throughput. Including: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.*

*Discharges: Any discharge of water or liquid waste of more than 5m<sup>3</sup>/day to ground (i.e. to seep away) or to surface water, such as a beck or stream.*

*Water Supply: Large infrastructure such as warehousing / industry where total net additional gross internal floorspace following development is 1,000m<sup>2</sup> or more.*

*Notes 1: New residential developments in this area should consider recreational disturbance impacts on the coastal designated sites. Please consider this issue in the HRA screening.*

#### Priority Habitats Inventory

- 3.1.2 The Priority Habitats Inventory<sup>2</sup> was checked via MAGiC map. No priority habitats are present within the site boundary.

<sup>2</sup> A spatial dataset that describes the geographic extent and location of Natural Environment and Rural Communities Act (2006) Section 41 habitats of principal importance.

## 3.2 Vegetation and Habitats

### General Description

- 3.2.1 The approximately 0.06 hectare site is in a suburban location and comprises amenity grassland, ornamental planting, a non-native species poor hedgerow, broadleaved trees, young trees and shrubs and hard standing, and is managed as a garden. The site features a sloping topography from east to west.
- 3.2.2 The northern site boundary is defined by a wooden fence with a concrete base, beyond which lies residential housing and gardens. The eastern site boundary is defined by a brick wall, beyond which lies Alwood Avenue. The southern site boundary is defined along half its length by a wooden fence with a concrete base, along a quarter of its length by a brick wall and (at its eastern section) is undefined, beyond which lies the remaining garden and property occupying 91a North Park Drive. The western site boundary is defined by a wooden fence with a concrete base, beyond which lies residential properties and gardens.
- 3.2.3 A Phase 1 Habitat Survey map is appended at **Figure 2**, and can be referred to for all habitat descriptions. Photographs are appended at **Table 8.2**.

### Amenity grassland

- 3.2.4 Refer to **Photos 1** and **2**. Amenity grassland covers the majority of the site with a small area of hard standing at the eastern end of the site. The western aspect of the amenity grassland features a layer of leaf litter and is mostly devoid of vegetation.
- 3.2.5 The vegetation is characterised by constant and abundant Perennial Rye-grass (*Lolium perenne*), abundant White Clover (*Trifolium repens*), constant and frequent Daisy (*Bellis perennis*) and Annual Meadow-grass (*Poa annua*), occasional Creeping Buttercup (*Ranunculus repens*), Dove's-foot Crane's-bill (*Geranium molle*) and Common Nettle (*Urtica dioica*) and rare Daffodil (*Narcissus pseudonarcissus*).
- 3.2.6 The amenity grassland is characteristic of the MG7 (*Lolium perenne* leys and related grasslands) NVC community (Rodwell, 1992). A plant species list is appended at **Table 8.1**.

### Ornamental Planting and Woody Species

- 3.2.7 Ornamental planting is located along the northern, eastern and southern site boundaries, with a row of Leyland Cypress (*X Cuprocyparis leylandii*) present at the northern site boundary (Refer to **Photo 3**).
- 3.2.8 The vegetation is characterised by occasional Pendulous Sedge (*Carex pendula*), Leyland Cypress and Garden Strawberry (*Fragaria ananassa*) and ornamental shrubs with rare Butterfly-Bush (*Buddleja davidii*), Spotted Laurel (*Aucuba japonica*) and Italian Lord's and Ladies (*Arum italicum*).
- 3.2.9 The ornamental planting is not indicative of any NVC community.
- 3.2.10 The western site boundary features a mature Weeping Willow (*Salix alba x babylonica* = *S. x sepulcralis*) and young trees of Field Maple (*Acer campestre*), Goat Willow (*Salix caprea*) and Silver Birch (*Betula pendula*) are present along the western and northern site boundaries. (Refer to **Photos 4** to **6**).

### Invasive Plant Species

- 3.2.11 No Japanese Knotweed is present at the site.
- 3.2.12 As illustrated on **Figure 2**, stands of Entire-leaved Cotoneaster (*Cotoneaster integrifolius*) were detected along the northern boundary. This species is listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended); it is an offence to spread or cause its spread in the wild. This is considered further at **Section 4.3** below.

### 3.3 Animal Life

#### Badger

- 3.3.1 No signs of badger were detected during the survey.
- 3.3.2 The habitats present within the site offer limited opportunities for foraging badger and are well sealed on all aspects.
- 3.3.3 The presence of badger is reasonably discounted.

#### Bat Species

##### Trees

- 3.3.4 No trees support any features suitable for use by roosting bats. The presence of roosting bats in the site is reasonably discounted.

##### Habitat Assessment for Commuting and Foraging Bats

- 3.3.5 The trees and shrubs along the site margins are suitable for use by foraging bats, particularly pipistrelle species, however the amenity grassland within the site is unlikely to provide an abundance or diversity of invertebrate prey, and is therefore considered to be of low suitability for use by foraging bats.
- 3.3.6 The habitats present may be suitable for and contribute to the wider foraging area of low numbers of common species of edge-feeding foraging bats, such as common pipistrelle (*Pipistrellus pipistrellus*), and also low numbers of species known to forage over open habitats and over wide areas, such as noctule (*Nyctalus noctula*).
- 3.3.7 A diverse range of species and / or a large number of bats are considered unlikely at the site owing to the absence of habitats such as woodland or tree-lined watercourses within the site.

#### Bird Species

- 3.3.8 Birds detected in the site in February 2021 are listed in **Table 3.1**, below.

**Table 3.1: Bird species Detected on 2<sup>nd</sup> February 2021**

Scientific Name	Common Name (number seen)	BOCC Status <sup>1</sup>	Priority Species?
<i>Aegithalos caudatus</i>	Long-tailed tit	Green	No
<i>Cyanistes caeruleus</i>	Blue tit	Green	No
<i>Erithacus rubecula</i>	Robin	Green	No
<i>Fringilla coelebs</i>	Chaffinch	Green	No
<i>Larus argentatus</i>	Herring gull	Red	Yes
<i>Larus ridibundus</i>	Black-headed gull	Amber	No
<i>Parus ater</i>	Coal tit	Green	No
<i>Passer domesticus</i>	House sparrow	Red	Yes
<i>Pica pica</i>	Magpie	Green	No
<i>Prunella modularis</i>	Dunnock	Amber	Yes
<i>Troglodytes troglodytes</i>	Wren	Green	No
<i>Turdus merula</i>	Blackbird	Green	No

<sup>1</sup>BOCC: Birds of Conservation Concern (Eaton, et al., 2015)

- 3.3.9 The trees are all suitable for use by nesting passerine (i.e. perching) species, including those detected within the site during the survey. Old nests were visible in the mature Weeping Willow located at the western site boundary. All bird species, with the exception of black-headed gull and herring gull (which were observed flying over the site), were observed within the trees at the western and northern site boundary. This is considered further at **Section 4.4**, below.

## Reptiles

- 3.3.10 The regularly disturbed and heavily managed habitats within the site provide poor quality habitat for sheltering, basking and hibernating reptiles. The site supports an even topography and the homogenous vegetation supports little variation in its physiognomy. There are no piles of garden waste or other suitable debris for use by sheltering or hibernating reptiles, and the site supports no favourable habitat for basking reptiles. The species-poor habitats within the site are reasonably unlikely to support a large populations or a variety of invertebrate prey.
- 3.3.11 The site is not adjacent or linked to any areas of favourable habitat for reptile species. The presence of reptiles within the site is reasonably discounted.

## Other Wildlife

- 3.3.12 Habitats suitable for foraging European hedgehog (*Erinaceus europaeus*) were present within the site boundary, however the site boundaries are well sealed, including gated access points; the presence of hedgehog is reasonably discounted.

## 4.0 EVALUATION AND ASSESSMENT

### 4.1 Introduction and Description of Proposals

- 4.1.1 In accordance with *Proposed Site Layout Drawing Number PR-01* (Stephen Tortely Architect, 2021), hereafter the 'proposals plan' it is proposed to develop the site to a single residential dwelling.
- 4.1.2 **Section 4.2** provides an assessment of any impacts of the proposed development on the designated sites for nature conservation present in the wider area. The ecological value of habitats within the site are evaluated at **Section 4.3**, and protected and notable species are considered at **Section 4.4**.
- 4.1.3 Impacts upon the habitats within the site, and upon the protected and notable species associated with the site, are assessed at **Section 4.5**.

### 4.2 Designated Sites for Nature Conservation

- 4.2.1 The habitats within the site do not complement those of Martin Mere Blackpool SSSI and the site will not contribute to the nature conservation value of Martin Mere Blackpool SSSI. It is considered that the proposed development of a single residential dwelling within an existing suburban garden is reasonably unlikely to significantly contribute to any recreational pressures to the SSSI associated with residential developments either alone or in combination.

### 4.3 Vegetation and Habitats

- 4.3.1 The site contains only common and widespread plant species. None of the habitats within the site are of significant interest in terms of their plant species composition. None of the habitats present are representative of semi-natural habitat. The NVC communities present are typical of the geographical area and conditions present. No Priority Habitats are present.
- 4.3.2 The mature trees and shrubs are of local value as they add structural diversity and support breeding birds.
- 4.3.3 The presence of Entire-leaved Cotoneaster, an invasive species listed under Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended), has been detected within the site. It is considered that the proposals present an opportunity for the eradication of this species as part of the proposed development. Further guidance is presented at **Section 5.3** of this report

#### **4.4 Protected Species and Other Wildlife**

- 4.4.1 Habitats within and adjacent to the site are suitable for foraging and commuting bats. Recommendations relating to the retention of features suitable for use by foraging and commuting bats, and features to enhance habitats for roosting bats at the site are presented at **Section 5.4**.
- 4.4.2 The trees and shrubs provide favourable foraging and nesting habitat for the species of birds detected within the site and the wider area (including house sparrow, a Priority Species). Consideration of birds (including protection of breeding birds and recommended enhancements for Priority Species) are presented at **Section 5.5** of this report.
- 4.4.3 Recommendations for the enhancement of habitat connectivity throughout the developed site are presented at **Section 5.6** of this report.

#### **4.5 Assessment of Impacts**

- 4.5.1 In accordance with the proposal plan one residential dwelling will be developed at the site.
- 4.5.2 The proposals will replace the amenity grassland and areas of ornamental planting and hard standing with a building with associated car parking and gardens. The gardens will face out to the east and west and the row of trees along at the western and northern site boundary will be retained.
- 4.5.3 Any light pollution from the site could impact upon the ecological value of the broadleaved trees at the western and northern site boundary and the further green corridor to the north created by the network of residential gardens with mature and young broadleaved trees. Recommendations for the suitable use of lighting at the site are presented at **Section 5.4** of this report.
- 4.5.4 Recommendations for the compensation for the loss of trees and shrubs within the site are presented at **Section 5.5** of this report.
- 4.5.5 The proposals present an opportunity to enhance the wildlife potential of the site for foraging and commuting bats, Priority Species of bird associated with the habitats present within the site and for hedgehog by the planting of native species of trees and shrubs and by incorporating bat boxes and bird boxes into the design of the site.

### **5.0 RECOMMENDATIONS AND ECOLOGICAL ENHANCEMENT**

#### **5.1 Introduction**

- 5.1.1 These recommendations aim to ensure that the development is implemented in accordance with relevant wildlife legislation, Natural England guidance, the principles of the National Planning Policy Framework (NPPF), local planning policy and best practice.
- 5.1.2 The recommendations address the potential impacts identified in **Section 4.0** and are appropriate and proportionate.
- 5.1.3 In accordance with Chapter 15, paragraph 175 point 'd' of the NPPF, when determining planning applications, local planning authorities should encourage opportunities to incorporate biodiversity improvements in and around developments, especially where this can secure measurable net gains for biodiversity.
- 5.1.4 Where possible, opportunities to enhance the ecological interest and habitat connectivity and seek biodiversity gain through appropriate landscape planting and habitat creation have been identified.

- 5.1.5 All recommendations are appropriate to the geographical area, the habitats in the wider area, the wildlife present in the local area (and likely to use the site post-construction) and take into consideration the end use of the site as a residential development.

## 5.2 Protection of Existing Vegetation and Recommendations in Relation to Site Layout

### Protection of Trees, Shrubs and Hedgerows

- 5.2.1 During the construction phase, temporary protective demarcation fencing will be used to protect the trees to be retained. The fencing must extend outside the canopy of the retained trees and must remain in position until all areas have been developed to ensure protection is provided throughout the construction phase.
- 5.2.2 The fencing will be in accordance with BS5837:2012 *Trees in Relation to Design, Demolition and Construction: Recommendations* (BSI, 2012).

## 5.3 Invasive Plant Species

- 5.3.1 It is an offence under the *Wildlife and Countryside Act 1981* (as amended) to cause the spread of Entire-leaved Cotoneaster in the wild. It is recommended that this species is grubbed out by the roots during site clearance and disposed of either by burying on site or removal to a suitable tip.

### Lighting

- 5.3.2 Paragraph 180, bullet point 'c' in Chapter 15 (conserving and enhancing the natural environment) of the NPPF states that development should:

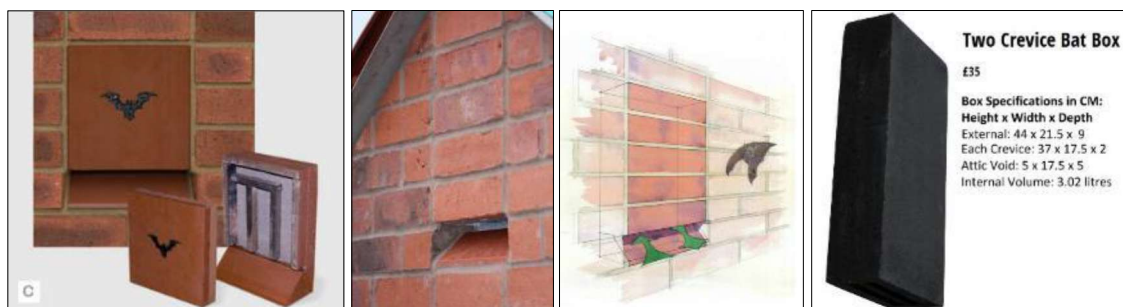
*'limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.'*

### Development Lighting Design

- 5.3.3 The lighting scheme to be implemented at the developed site must involve the use of appropriate products and screening, where necessary, to ensure no excessive artificial lighting shines over the broadleaved trees as the western and northern site boundary and the broadleaved trees outside the northern site boundary as lighting overspill may deter use by wildlife such as foraging bats.
- 5.3.4 The lighting scheme will be designed with reference to current guidance, namely:
- a. *Guidance Note 8: Bats and Artificial Lighting in the UK* (Institution of Lighting Professionals & Bat Conservation Trust, 2018); and
  - b. *Bats and lighting: Overview of current evidence and mitigation guidance* (Stone, 2014).

## 5.4 Bats

- 5.4.1 It is recommended that the development incorporates the installation of one bat access panel at the new building.
- 5.4.2 The bat access panel should be sited at least 4 metres above ground level, ideally facing or close to areas of landscape planting or existing linear features. The access panel should not be positioned over windows or doorways where bat droppings may become a nuisance. Once the development layout has been finalised, an ecologist should advise on appropriate positions for the bat access panels. Suitable bat access panels are available from NHBS Ecology ([www.nhbs.com](http://www.nhbs.com)) or Wild Care ([www.wildcare.co.uk](http://www.wildcare.co.uk)) and are presented at **Insert 1**, below:



**Insert 1:** Examples of integrated bat access panels and an externally mounted box<sup>3</sup>

- 5.4.3 It is recommended that one bat box is erected onto a suitable retained mature tree within the site. An ecologist will advise on the siting of the bat box whilst on site.
- 5.4.4 Suitable bat boxes are the Schwegler 1FF, Greenwood Ecohabitat's single or double cavity boxes and Schwegler 1FD, see **Insert 2**, below.



**Insert 2:** Schwegler 1FF, Greenwood Ecohabitat's single cavity and Schwegler 1FD bat boxes

- 5.4.5 Bat boxes should be installed to the following guidelines (Bat Conservation Trust, 2016):
- At least 4 metres above the ground (where safe installation is possible);
  - Sheltered from strong winds and exposed to the sun for part of the day (usually south or south-west);
  - Located close to unlit linear features, such as lines of trees or hedgerows; and
  - Installed where the bat box entrance is not cluttered or impeded by branches, or accessible to predators (such as cats) by large branches underneath them.

## 5.5 Birds

### Protection

- 5.5.1 All wild birds are protected under the *Wildlife and Countryside Act 1981* (as amended) while they are breeding. It is advised that any works such as vegetation clearance that will affect habitats suitable for use by nesting birds are scheduled to commence outside the bird nesting season. Commencement of works in the nesting season must be informed by a pre-works nesting bird survey, carried out by a suitably experienced ecologist. The bird breeding season typically extends between March to August inclusive (Natural England, 2015).

<sup>3</sup> Left to right: IBstock Enclosed Bat Box 'c' (left); Habitat Bat Access Panels (centre left and centre right) and Greenwood's Ecohabitat's two crevice bat box (right). Products with a brick face are illustrated, however the Habitat bat access panels can be supplied unfaced to enable the additional of matching material.



5.5.2 If breeding birds are detected the ecologist will issue guidance in relation to the protection of the nesting birds in conjunction with the scheduled works. This may involve cordoning off an area of the site until the young birds have fledged.

**Enhancing Habitats for Nesting Birds**

***House Sparrow***

5.5.3 House sparrows are associated with suburban areas. Monitoring suggests a severe decline in the UK house sparrow population, estimated as halving in rural areas, and dropping by 60% in towns and cities since the mid-1970's (RSPB, 2018).

5.5.4 The installation of one house sparrow terrace nest boxes is recommended at the proposed new housing. The box will not be positioned over windows or doorways where droppings may become a nuisance. RSPB advice states that boxes should ideally be sited facing north to east, to avoid exposure to direct sunlight, which may cause overheating of chicks in the nest. An example of a suitable house sparrow bird box is given below at **Insert 3**:



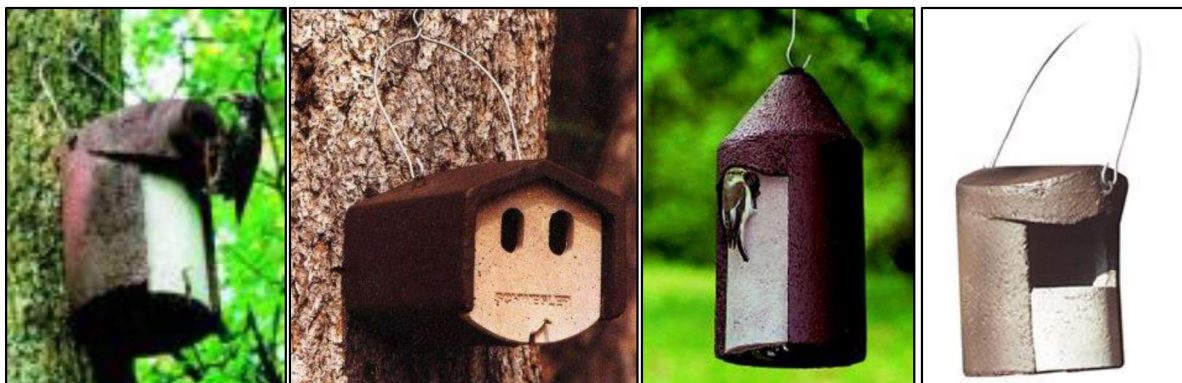
**Insert 3:** Schwegler 1SP House Sparrow Nesting Terrace

5.5.5 Such bird boxes are available from the NHBS ([www.nhbs.com](http://www.nhbs.com)) or Wild Care ([www.wildcare.co.uk](http://www.wildcare.co.uk)). ERAP (Consultant Ecologists) Ltd will advise on the siting of bird boxes.

***Woodland Birds***

5.5.6 Two bird boxes associated with woodland bird species are to be installed at the retained mature trees within the site. An ecologist will advise on the siting of the woodland bird boxes whilst on site. RSPB advice states that boxes should ideally be sited facing north to east, to avoid exposure to direct sunlight, which may cause overheating of chicks in the nest. The boxes should be at least 4 metres from ground level.

5.5.7 A mix of each of the boxes presented at **Insert 4**, below, will be used.



**Insert 4:** Schwegler 3SV, Schwegler 1N, Schwegler 2M and Schwegler 2H bird boxes, suitable for a variety of woodland birds.

## 5.6 Landscape Planting and Enhancement of Habitat Connectivity Throughout the Developed Site

### Maintenance of Habitat Connectivity Throughout the Developed Site

- 5.6.1 To enhance habitat connectivity is maintained as part of the development proposals, gaps within the existing fencing should be created (see **Insert 5**, below, although a simpler design is also appropriate) to allow access by other wildlife (including hedgehog) across the site. It is recommended that suitable wildlife gaps (at least 0.1 metre tall and 0.15 metre wide) are installed at suitable intervals around the base of the proposed fencing.



**Insert 5:** Showing wildlife access gap within fencing.

### Landscape Planting

- 5.6.2 It is recommended that the landscape planting within the residential site is composed from native species and species known to be of value for the attraction of wildlife.
- 5.6.3 It is recommended that trees which support blossom and fruit which will attract insects are incorporated into the landscape planting. Suitable species are presented at **Table 5.1**, below.

**Table 5.1: Suitable Native Species for Tree and Shrub Planting**

Scientific Name	Common Name	Scientific Name	Common Name
<i>Acer campestre</i>	Field Maple	<i>Prunus spinosa</i>	Blackthorn
<i>Corylus avellana</i>	Hazel	<i>Rosa arvensis</i>	Field Rose
<i>Crataegus monogyna</i>	Hawthorn	<i>Rosa canina</i>	Dog-rose
<i>Ilex aquifolium</i>	Holly	<i>Sambucus nigra</i>	Elder
<i>Malus sylvestris</i>	Crab Apple	<i>Sorbus aucuparia</i>	Rowan
<i>Prunus avium</i>	Wild Cherry	<i>Ulmus glabra</i>	Wych Elm
<i>Prunus padus</i>	Bird Cherry	<i>Viburnum opulus</i>	Guelder Rose

- 5.6.4 The understorey and ground cover planting design should be prepared to optimise the attraction of invertebrates such as feeding bumblebees and butterflies. Where possible the use of native species should be maximised but where necessary non-native species known to be attractive to invertebrates should be used.
- 5.6.5 Planting schemes that include flowering species such as *Viburnum*, *Ceanothus*, *Hebe*, *Lavandula*, *Lonicera*, *Potentilla*, *Rosmarinus* and *Vinca* can maximise opportunities for feeding invertebrates and for the attraction of foraging bats and birds.
- 5.6.6 For further plants suitable for the attraction of pollinators please refer to the *Perfect for Pollinators Plant List* (Royal Horticultural Society, 2012). It is recommended that the selection of plant species at the site ensures that a variety of flowering species are available throughout the year.

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## 6.0 CONCLUSION

- 6.1 This ecological assessment has demonstrated that a residential development at the site is feasible and acceptable in accordance with ecological considerations and the National Planning Policy Framework.
- 6.2 It is possible to implement reasonable actions for the protection and long-term conservation of fauna such as nesting birds and commuting/foraging bats associated with the site.
- 6.3 Measures to conserve the habitat connectivity through the site are entirely feasible.
- 6.4 Development at the site will provide an opportunity to secure ecological enhancement for fauna typically associated with residential areas such as breeding birds and roosting bats.

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## 8.0 APPENDIX: TABLES AND FIGURES

**Table 8.1: Plant Species List for the Whole Site**

Scientific Name	Common Name	DAFOR <sup>1</sup>	Cover
<b>Woody Species</b>			
<i>Acer campestre</i>	Field Maple	O	1%
<i>Aucuba japonica</i>	Spotted-laurel	R	<1%
<i>Betula pendula</i>	Silver Birch	R	<1%
<i>Buddleja davidii</i>	Butterfly-bush	R	<1%
<i>Cotoneaster integrifolius</i>	Entire-leaved Cotoneaster	R	<1%
<i>Ilex aquifolium</i>	Holly	R	<1%
<i>Lonicera japonica</i>	Japanese Honeysuckle	R	<1%
<i>Quercus robur</i>	Pedunculate Oak	R	<1%
<i>Salix alba x babylonica</i> = <i>S. x sepulcralis</i>	Weeping Willow	R	<1%
<i>Salix caprea</i>	Goat Willow	R	<1%
<i>Sambucus nigra</i>	Elder	R	<1%
<i>X Cuprocyparis leylandii</i>	Leyland Cypress	O	1%
<b>Herb Species</b>			
<i>Arum italicum</i>	Italian Lords-and-Ladies	R	<1%
<i>Bellis perennis</i>	Daisy	F*	5%
<i>Calystegia silvatica</i>	Large Bindweed	R	<1%
<i>Cardamine flexuosa</i>	Wavy Bitter-cress	R	<1%
<i>Carex pendula</i>	Pendulous Sedge	O	1%
<i>Chamerion angustifolium</i>	Rosebay Willowherb	R	<1%
<i>Festuca ovina</i>	Sheep's-fescue	O	1%
<i>Ficaria verna</i>	Lesser Celandine	R	<1%
<i>Fragaria ananassa</i>	Garden Strawberry	O	1%
<i>Geranium molle</i>	Dove's-foot Crane's-bill	O	1%
<i>Geranium robertianum</i>	Herb-Robert	O	1%
<i>Geum urbanum</i>	Wood Avens	R	<1%
<i>Hedera helix</i>	Ivy	LA	<1%
<i>Hyacinthoides hispanica</i>	Spanish Bluebell	R	<1%
<i>Hypericum androsaemum</i>	Tutsan	O	1%
<i>Juncus effusus</i>	Soft-rush	R	<1%
<i>Lolium perenne</i>	Perennial Rye-grass	A*	65%
<i>Narcissus pseudonarcissus</i>	Daffodil	R	<1%
<i>Poa annua</i>	Annual Meadow-grass	F*	5%
<i>Primula veris</i>	Cowslip	R	<1%
<i>Ranunculus repens</i>	Creeping Buttercup	O	1%
<i>Rhytidiadelphus squarrosus</i>	Springy Turf-moss	LD/O	<1%
<i>Senecio jacobaea</i>	Common Ragwort	O	1%
<i>Taraxacum officinale</i> agg.	Dandelion	F	2%
<i>Trifolium dubium</i>	Lesser Trefoil	F	2%
<i>Trifolium repens</i>	White Clover	A	3%
<i>Urtica dioica</i>	Common Nettle	O	1%
<i>Veronica chamaedrys</i>	Germander Speedwell	F	2%

<sup>1</sup>**Key to DAFOR:** D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, V=Very, L=Local and \*denotes a constant species

**Table 8.2: Table of Photographs**



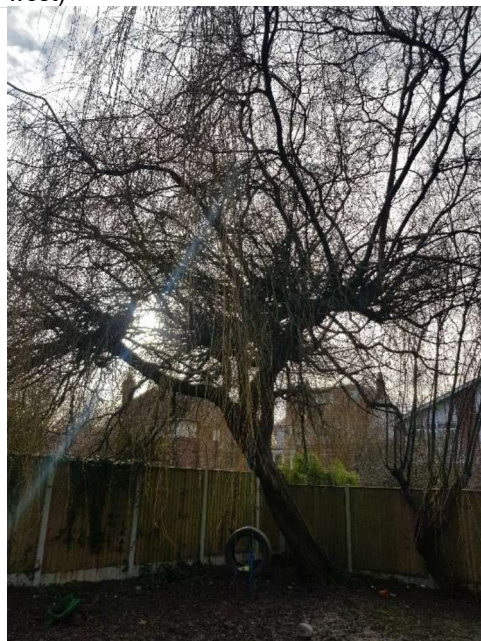
**Photo 1 – Amenity grassland (Facing east)**



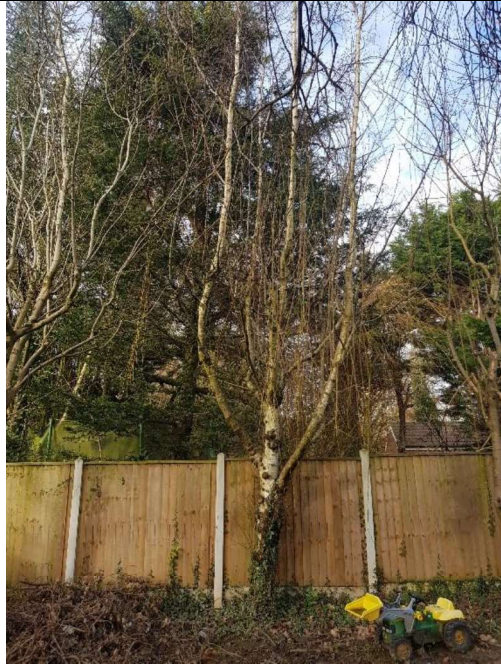
**Photo 2 – Amenity grassland and broadleaved trees (Facing west)**



**Photo 3 – Ornamental planting at northern site boundary**



**Photo 4 – Weeping willow tree**



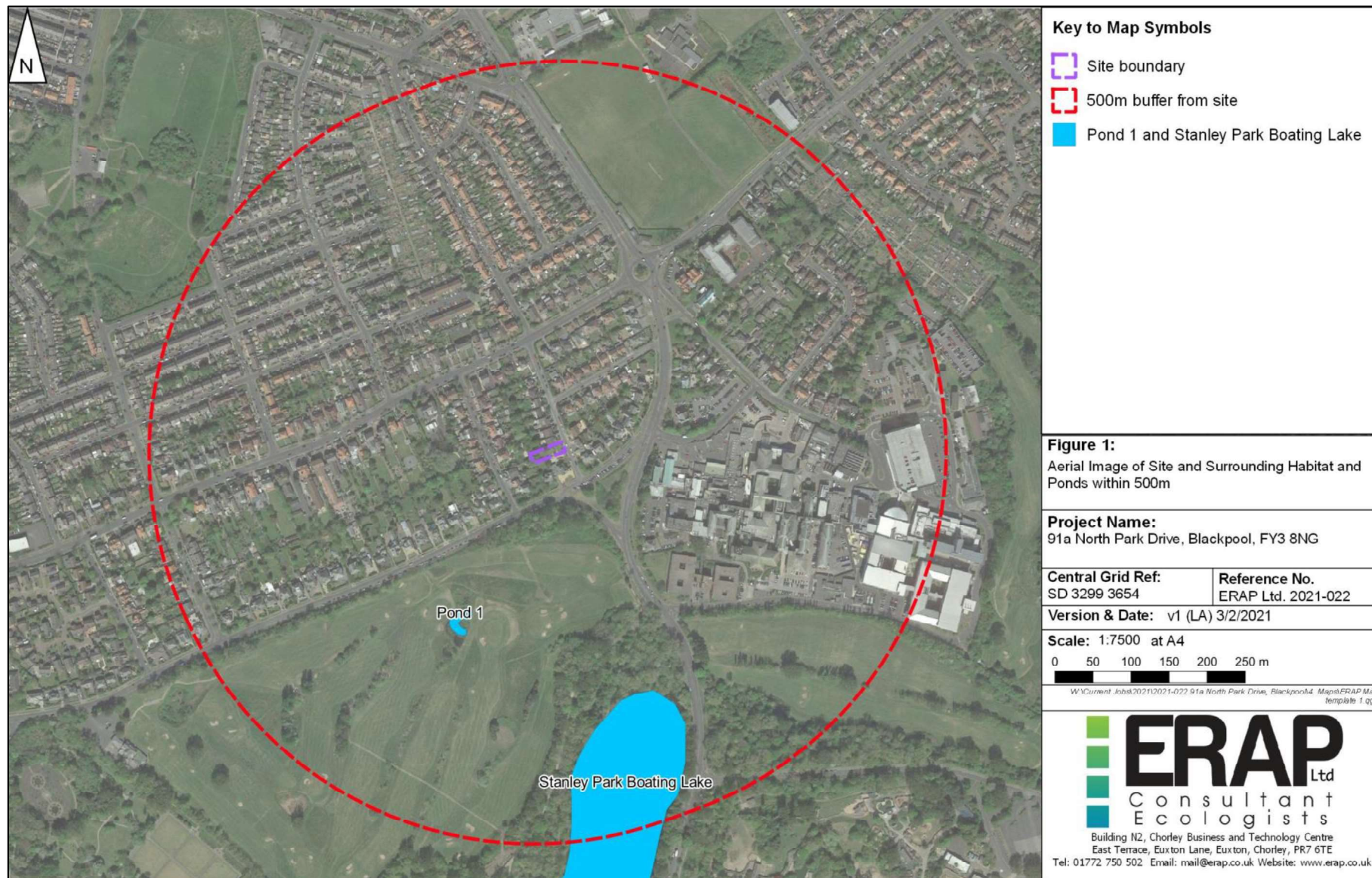
**Photo 5** Young trees at northern site boundary



**Photo 6** – Young trees at western site boundary



**Figure 1: Aerial Image of the Site and its Surrounding Habitats**



**Figure 2: Phase 1 Habitat and Vegetation Map**

