



ECOLOGICAL IMPACT ASSESSMENT

**Land off Manor Park, Nyetimber Lane, Pagham, Bognor
Regis**

Planning Issue

Prepared by	GS
Checked by	LB
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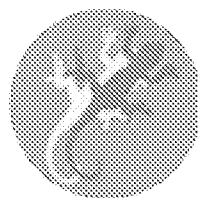
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L I Z A R D

Landscape Design and Ecology

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SUMMARY

Lizard Landscape Design and Ecology has been commissioned to undertake an Ecological Impact Assessment of the land adjacent to Manor Park, Nyetimber Lane, Pagham, Bognor Regis (*Grid Reference: SZ 894 983 – hereafter referred to as 'the site'*).

A Preliminary Ecological Appraisal (*PEA*) was undertaken on 27th January 2020, to appraise the existing ecological resource within the land and the surrounding area, a full Ecological Impact Assessment was then completed using this data.

The existing site is formed of amenity grassland with scattered trees, surrounded by very small patches of introduced shrub and hard surfaces. The habitats within the proposed construction zone are of low ecological value. One tree to the edge of the site offers 'moderate' bat roost potential but shall not be impacted by the proposals.

Because of the scale and nature of the site, the proposals are highly unlikely to constitute any significant direct impact upon the nearby *Pagham Harbour (SPA, RAMSAR, SSSI)*. The proposals may result in indirect impacts from a minor increase in visitor numbers. The proposals would require a contribution be made to the Strategic Access Management and Monitoring scheme (*SAMMs*) in place for the *Pagham Harbour SPA*.

Once avoidance and mitigation measures for breeding birds have been taken into account, the impacts of the planned development upon biodiversity will be **negligible, non-significant** with proposed replacement planting preventing any biodiversity losses on site.

1.0 INTRODUCTION

- 1.1 Lizard Landscape Design and Ecology has been commissioned to undertake an Ecological Impact Assessment of the land adjacent to Manor Park, Nyetimber Lane, Bognor Regis (*Grid Reference: SZ 894 983 – hereafter referred to as 'the site'*).
- 1.2 A Preliminary Ecological Appraisal (*PEA*) was undertaken on 27th January 2020, to appraise the existing ecological resource within the land and the surrounding area. The *PEA* comprised a baseline survey conforming broadly to the *JNCC Ecology Phase 1 Habitat Survey* protocol, to identify the existing habitats. In addition, a protected species assessment was undertaken to identify the potential for European and nationally protected species within and adjacent to the land. A full Ecological Impact Assessment (*EclA*) was then undertaken using this baseline data.
- 1.3 A summary of the results and potential impacts of the proposals, and details of avoidance, mitigation and compensation measures have been detailed within this report. This report has been prepared by George Sayer (*Project Ecologist; BSc(Hons) PgDip; Lizard Landscape Design and Ecology*). The report has been reviewed by Louise Barker (*Project Ecologist; MSc BSC (Hons) Lizard Landscape Design and Ecology*).

Site Information

- 1.4 The small site covers an area of 0.1 hectares (Ha) and is accessed via Manor Park. The site consists of a wide grass verge with a number of planted, ornamental trees. The vegetation appears well-maintained and is surrounded by the hard surfaces of Manor Park and the boundary fence of the Barton Manor Apartments.
- 1.5 The site is located approximately at sea level. Soils on site are described as *Loamy soils with naturally high groundwater*.

Surrounding Landscape

- 1.6 The surrounding landscape is heavily built-up, with residential buildings dominating for a minimum of 500 metres (m) north, 9.5 kilometres (km) east, 800m south and 400m west, after which arable land dominates towards the north and east with the south coast to the south.
- 1.7 There are 4no. waterbodies located within 500m, all of which are located within 250m. These consist of 1 no. ornamental garden pond, 2 no. duckponds and a section of stream.

Development Proposals

- 1.8 It is understood that the proposals include the construction of 4no. residential buildings with 8no. accompanying parking spaces. The access would come from the north of the site off the existing Manor Park road.

Aims

- 1.9 The aim of this ecological appraisal survey has been:
- *To identify habitats and protected species present, and any other features of ecological value;*
 - *Identify any potential ecological constraints;*
 - *Identify impacts of the proposed development and set out appropriate avoidance, mitigation and compensation measures;*
 - *To provide suggestions for enhancements to be incorporated into the scheme.*

2.0 PLANNING POLICY AND LEGISLATION**Legislation**

- 2.1 Legislation relating to wildlife and biodiversity of particular relevance to this EcIA includes:
- *The Conservation of Habitats and Species Regulations 2017;*
 - *The Wildlife and Countryside Act 1981 (as amended);*
 - *The Natural Environment and Rural Communities (NERC) Act 2006.*

- 2.2 This above legislation has been addressed, as appropriate, in the production of this report.

National Planning Policy

- 2.3 The National Planning Policy Framework (NPPF) 2019 sets out the government planning policies for England and how they should be applied. '*Chapter 15: Conserving and Enhancing the Natural Environment*' states that development should be '*minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.*'
- 2.4 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

Local Planning Policy

- 2.5 Policy ENV DM1, DM3 & DM5 of the Arun Local Plan 2011 – 2031 states:
- *Development shall seek to achieve Biodiversity Net Gain and protect existing habitats on site;*
 - *Development proposals shall incorporate green roofs, green walls, bird and bat boxes as well as landscape features which minimise impacts on existing biodiversity;*
 - *Where there is evidence of protected species, a full survey will accompany the planning application to include mitigation measures;*
 - *Proposed development will cause no harm to any protected site unless there is no suitable alternative and the benefits outweigh the harm;*
 - *Development within 400m of Pagham Harbour will only be permitted in exceptional circumstances;*
 - *Development within 5km of Pagham Harbour will be required to make developer contributions to the agreed strategic approach to access management at Pagham Harbour and create or allow access to green spaces for recreation with good pedestrian links.*

- 2.6 The site is c. 750m north of the *Pagham Harbour SPA*; developer contributions towards the agreed strategic access management would be required to mitigate impacts of recreation upon the SPA.

3.0 METHODOLOGY

3.1 Desk Study

- 3.1.1 The Multi-Agency Geographic Information for the Countryside (*MAGIC*) was consulted for all designated sites, priority habitats and protected species licence records within 2.0km of the site. The desk search was conducted on 27th January 2020.

3.2 Field Survey

- 3.2.1 A preliminary ecological appraisal was undertaken on 27th January 2020, and the site subjected to an ecology survey using guidelines set out in the *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit (JNCC, 2003)*.
- 3.2.2 Habitats within the land were classified and the presence, or potential presence, of certain protected and / or notable species of flora and fauna were identified. A summary description of the habitat within the site following the *Phase 1 Habitat Survey Methodology* is presented in Section 4.0. This involved identifying features that may be used by protected species, potential foraging areas and other signs of use. Water bodies were recorded wherever possible, within 500 metres of the proposed development site.
- 3.2.3 The results are summarised and accompanied in large part by photographic evidence contained in *Appendix A – Site Photographs*. Recommendations for further investigation and survey are made in the following report.

3.3 Ground-Level Bat Roost Assessment

3.3.1 A Ground Level Bat Roost Assessment of trees on site was undertaken on 27th January 2020 by an experienced, licenced bat surveyor. Trees were visually identified from the ground, using binoculars where necessary, for features that could be used by bats such as:

- *Woodpecker Holes;*
- *Knot Holes;*
- *Tear-outs;*
- *Flush Cuts;*
- *Double Leaders.*

3.3.2 Once features had been assessed the trees were then categorised in accordance with *Table 4.1 of the Bat Conservation Trust's Good Survey Guidelines (2016) (shown below):*

Table No. 01 – Bat Roost Suitability Guidelines (BCT, 2016)

Category	Trees
Negligible	<i>No suitable features identified.</i>
Low	<i>Tree of sufficient size / age to support bat roost features; but with none identified from the ground.</i>
Moderate	<i>Tree with features which, may support a bat roost of low conservation status.</i>
High	<i>A tree with several potential bat roost sites that are suitable for use by a large number of bats.</i>

3.4 Ecological Impact Assessment

3.4.1 The methodology for EcIA follows best practice guidelines set by the Chartered Institute of Ecology & Environmental Management (CIEEM): 'Guidelines for Ecological Impact Assessment' (CIEEM, 2018). This includes identifying the baseline conditions on the site and subsequently rating the potential effects of the development based on the sensitivity and value of the resource affected, combined with the magnitude, duration and scale of the impact (or change). This is initially assessed without mitigation measures, and then assessed again after allowing for the proposed mitigation measures; this provides the residual effects. The assessment is divided into construction effects and longer-term operational effects.

3.4.2 Each ecological feature within the site has been considered within a defined Geographic context such as:

- *International and European*
- *National*
- *Regional*
- *County*
- *District*
- *Local*
- *Site Level*
- *Negligible.*

3.4.3 Based upon CIEEM guidance, value was determined with reference to the following factors:

- *Its inclusion as a Designated Site or other protected area;*
- *The presence of habitat types of conservation significance, e.g. Habitats of Principal Importance (NERC 2006);*
- *The presence (or potential presence) of species of conservation significance e.g. Species of Principal Importance (NERC 2006);*
- *The presence of other protected species e.g. those protected under The Wildlife and Countryside Act 1981;*
- *The sites social and economic value.*

- 3.4.4 The ecological impacts resulting from the proposals were then described according to a defined set of characteristics as defined within '*Guidelines for Ecological Impact Assessment in the UK and Ireland*' (CIEEM, 2018). This assessment considers residual impacts (once all mitigation has been taken into account), with any significant effects highlighted. A significant effect is defined as "*an effect which either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general*".
- 3.4.5 The confidence that a certain activity will result in a significant adverse effect has been ranked as follows:
- *Highly probable;*
 - *Probable;*
 - *Unlikely;*
 - *Highly unlikely.*
- 3.5.6 Where initial impacts have been identified as significant, avoidance, mitigation and compensation measures have been proposed to avoid, prevent or offset such effects. Enhancement has been proposed to ensure that the development represents a net gain in biodiversity in accordance with National Policy.

4.0 BASELINE ECOLOGICAL CONDITIONS

4.1 Designated Sites

Statutory Protected Sites

- 4.1.1 MAGIC was consulted for details of ecologically sensitive statutory protected sites including SSSI's (within 2.0km), LNR's (within 2.0km) and SAC/SPA's (within 10km).

Table No. 02 – Statutory Protected Sites

Site	Description	Location
<i>Bognor Reef, SSSI</i>	<i>An extensive areas of vegetated shingle, a rare habitat in Britain and a small area of old sand dune supporting interesting flora.</i>	<i>0.67km S</i>
<i>Solent and Dorset Coast pSPA</i>	<i>An area of coastland of international significance for common tern, Sandwich tern And little tern. The proposal to make this area a Special Protection Area is currently being reviewed.</i>	<i>0.73km SE</i>
<i>Solent Maritime, SAC</i>	<i>Site encompasses; a major estuarine system, the only U.K site for spartina alteriflora and large Atlantic salt meadows.</i>	<i>7.1km NW</i>
<i>Chichester and Langstone harbours, RAMSAR, SPA</i>	<i>Two large estuarine basins linked and includes extensive intertidal mudflats, saltmarsh, sand and shingle pits and dunes supporting wintering birds. Supports populations of important winter fowl including, Redshank and Ringed Plover.</i>	<i>7.1km NW</i>
<i>Pagham Harbour, RAMSAR, SPA, SSSI</i>	<i>An estuarine basin comprising of wetland priority habitats including intertidal mud-flats and salt marsh noted for its importance for breeding birds.</i>	<i>750m S and 1.6km E</i>

- 4.1.2 The site is classified as being within the *Impact Risk Zone* of *Pagham Harbour SSSI*, therefore Natural England must be consulted regarding potential impacts upon this area.

Non-Statutory Protected Areas

- 4.1.3 *Local Wildlife Sites (LWSs)* are designations applied to the most important non-statutory nature conservation sites. They are recognised by the *National Planning Policy Framework (2019)* and as such are material considerations when assessing planning applications. There are no LWSs identified within 2.0km of the site.

4.2 Habitats

4.2.1 Within 2.0km of the site there are *Priority Habitats* of *Coastal Saltmarsh, Coastal Sand Dunes, Coastal Vegetated Shingle, Mudflats, Saline Lagoons, Coastal and Floodplain Grazing Marsh, Ancient Woodland (Semi Natural) and Deciduous Woodland*. None of the above habitats are situated in or within close proximity to the site.

4.2.2 Habitats within and adjacent to the land include:

- *Hard / Bare Ground;*
- *Amenity Grassland;*
- *Introduced Shrubs;*
- *Scattered Trees.*

Hard / Bare Ground

4.2.3 The site is surrounded by Manor Park road and areas of paving. This habitat is of **negligible value**.

Amenity Grassland

4.2.4 Almost all of the site is given over to grassland which appears well maintained. Perennial rye-grass (*Lolium perenne*) dominates the sward with stands of coarse cocksfoot (*Dactylis glomerata*). Young cow parsley (*Anthriscus Sylvestris*) is noted as well as forbs indicative of improvement such as broadleaved dock (*Rumex obtusifolius*) and nettle (*Urtica dioica*). This habitat is of **site value**.

Introduced Shrubs

4.2.5 A small patch of pampas grass (*Cortaderia selloana*) is present to the southern edge of the site. The western fence is overgrown by bamboo (*Fargesia sp.*) and laurustinus (*Viburnum tinus*). This habitat is extremely limited and of **negligible value**.

Scattered Trees

- 4.2.6 The site contains a number of trees, most of which appear to be planted. There are some native species such as hawthorn (*Crataegus monogyna*), two large ash (*Fraxinus excelsior*) and several large willows (*Salix sp.*). Ornamental varieties are present including cherry (*Prunus sp.*) and a number of cider gum (*Eucalyptus gunnii*). Several young southern blue gum (*Eucalyptus globulus*) have recently been planted. The trees show evidence of pruning and are of **site** value.

4.3 Protected Species Assessment

Amphibians

Desk Study

- 4.3.1 There are no records of Great Crested Newts (*Triturus cristatus*) within 5.0km of the site; the coastal and residential location is unlikely to be suitable for great crested newts. Great Crested Newts are protected under *The Conservation of Habitats and Species Regulations 2017*. It is an offence for anyone to intentionally kill, injure or disturb a Great Crested Newt or to damage, destroy or block access to areas of suitable habitat.

Site Assessment

- 4.3.2 There are 4no. ponds within 250m of the site. The nearest pond is a garden pond in the adjacent Barton Manor apartments, 40m west of the site. The pond is surrounded by hard surfaces and amenity grassland and appears well-maintained. Access was not available and as such HSI assessment was not undertaken. Two further ponds are duckponds with some potential for GCN to be present. The fourth is a stream which is considered to flow too strongly for GCN to be present.
- 4.3.3 The site is small, entirely isolated by fencing and roads, and of unsuitable habitat for GCN. The site is considered to offer 'negligible' potential for GCN. The risk of the proposed development committing an offence under the Conservation of Habitats and Species Regulations 2017 is considered to be negligible.

Reptiles*Desk Study*

- 4.3.4 There are several records of slow-worm within 2km of the site. All species of UK reptile are protected against reckless or intentional killing or injuring under *The Wildlife and Countryside Act 1981 (as amended)*.

Site Assessment

- 4.3.5 The site is well-maintained and lacks suitable long grass or ruderal vegetation which could support common species of reptile such as slow worm. There were several small grass and brash piles noted but these lacked structure and were not considered suitable for reptiles.

Bats*Desk Study*

- 4.3.6 There are very limited records of Pipistrelle bats (*Pipistrellus sp.*) within 2.0km of the site.

Site Assessment

- 4.3.7 The main body of the site offers some limited foraging suitability for bat species but is largely disconnected from other suitable habitats.
- 4.3.8 A single willow just outside the site (T01) was assessed as providing 'moderate' bat roost suitability. The tree contained a large but low cavity, which upon inspection by torch appeared to run up inside the tree. The cavity was dry and currently full of woodlice. No bats or evidence of bats was observed. The proposed construction zone itself holds no features suitable for bat roosting.

Dormouse*Desk Study*

- 4.3.9 There are no records of Hazel Dormouse (*Muscardinus avellanarius*) within 2.0km of the site.

Site Assessment

- 4.3.10 The site contains no hedgerows or continuous shrubs or scrub; the vegetation is scattered and largely ornamental. Consequently, the habitat on the site is considered to be of **negligible value** to dormice.

Badger*Desk Study*

- 4.3.11 No records of badger exist within 2.0km of the site area. Badgers are likely present in the wider area; the groundwater levels locally may be too high for optimal sett-building.

Site Assessment

- 4.3.12 No evidence of badger was recorded within the site, which is isolated and would offer very little foraging potential. The area is considered to be of **negligible value** for commuting badgers.

Other Mammals

- 4.3.13 Numerous records of other mammals including hedgehogs, water vole and deer exist within 2.0km of the site area. No evidence of the presence of other mammal species was noted. No suitable water vole habitat is present on or adjacent to the site.

Birds*Desk Study*

- 4.3.14 A total of 162 no. bird species have been returned within 2.0km of the site, with a large number associated with the nearby *Pagham Harbour*.

Site Assessment

- 4.3.15 The trees on site vary in size and species and would offer some potential for nesting birds. No birds' nests were noted during the survey.

Others

- 4.3.16 No suitable habitat for any other protected species was recorded on site. The habitats are not suitable for rare species of invertebrates.

4.4 Survey Constraints / Considerations

- 4.4.1 No major constraints which would cast doubt on these results were encountered, full access was available to all areas of the site.

5.0 ASSESSMENT OF EFFECTS AND MITIGATION MEASURES

5.1 Designated Sites

Potential Impacts

- 5.1.1 The site is shown as being located within the *Impact Risk Zone* of *Pagham Harbour SSSI*. The site is 750m from the *Pagham Harbour SPA*. In the absence of mitigation, impacts would include direct effects such as pollution from noise and dust, and indirect effects from increased recreational pressure upon the nearby SPA. Given the distances and intervening habitats, direct impacts are considered highly unlikely and of low impact. Indirect impacts are considered likely and of low impact.

Mitigation and Compensation

- 5.1.2 All works will be carried out in accordance with best practise to minimise any impacts from dust, noise and emissions. A contribution towards the strategic access management of the SPA would be required and determined by the LPA.

Residual Impacts

- 5.1.3 **No likely significant effect** upon surrounding European designated sites will arise from the proposed development.

5.2 Habitats

Potential Impacts

- 5.2.1 Development proposals will result in the loss of a small areas of amenity grassland and a small number of trees, while inappropriate construction methods could result in smothering of adjacent grassland and trees by dust, as well as disturbance through noise, vibration and emissions. Inappropriate lighting of trees during the operational phase could cause loss of commuting corridors for birds and bats. Given the scale of the development the potential impacts would be of very minor impact magnitude but likely to occur.

Mitigation and Compensation

- 5.2.2 All construction will be undertaken in accordance with best practice guidelines with regards to control of dust, noise and emissions. No artificial lighting will be used during the construction or operational phases. All adjacent trees are to be protected with Heras fencing affixed to a secure framework in accordance with BS5837:2012 'Trees in Relation to Design, Demolition and Construction'. No storage of fuel or other hazardous materials will be permitted on made ground.
- 5.2.3 Areas of bare ground resulting from the proposals will be re-planted with areas of native trees, ornamental planting and amenity grassland. Additional tree planting is proposed to replace those lost as a minimum.

Residual Impacts

- 5.2.4 Once mitigation is taken into account, the impacts will be **negligible, non-significant**.

5.3 Amphibians

Potential Impacts

- 5.3.1 None predicted, the site is of negligible value to amphibians.

Mitigation and Compensation

- 5.3.2 None required. In the highly unlikely event that GCN are found on site, all works will cease until a suitably qualified ecologist has been contacted for advice.

Residual Impacts

- 5.3.3 The impacts will be **negligible and non-significant**.

5.4 Reptiles*Potential Impacts*

- 5.4.1 In the absence of mitigation, impacts could include killing or injuring of individual reptiles and removal of suitable habitat. Given the small size, state and isolation of the site from other areas of suitable reptile habitat, impacts are likely to be of very minor impact magnitude and highly unlikely to occur.

Mitigation and Compensation

- 5.4.2 Vegetation on site is to be kept short (<100mm) prior to construction such that it does not become suitable for reptiles. Piles of grass cuttings and brash shall be manually removed from site. In the highly unlikely event that reptiles are found on site, all works will cease until a suitably qualified ecologist has been contacted for advice.

Residual Impacts

- 5.4.3 The impacts will be **negligible and non-significant**.

5.5 Bats*Potential Impacts*

- 5.5.1 In the absence of mitigation impacts may include habitat fragmentation, loss of foraging areas and loss of a small roost with subsequent killing or injuring of individual bats. Impacts would be of minor impact magnitude and unlikely to occur.

Mitigation and Compensation

- 5.5.2 No artificial lighting will be used during the construction or operational phase. The single tree which has been identified as offering bat roost suitability will be retained and protected within the scheme. Additional tree planting is proposed to replace those lost as a minimum.

Residual Impacts

- 5.5.3 The overall impact of the scheme will be **negligible, non-significant**.

5.6 Dormouse*Potential Impacts*

- 5.6.1 None predicted, no suitable habitat exists on-site.

Mitigation and Compensation

- 5.6.2 None required.

Residual Impacts

- 5.6.3 No impact.

5.7 Badgers and other Mammals*Potential Impacts*

- 5.7.1 In the absence of mitigation, impacts would include the trapping of mammals in footings/trenches, fragmentation of habitat and disruption of commuting corridors. Impacts would be of low impact magnitude and highly unlikely to occur.

Mitigation and Compensation

- 5.7.2 Any greater than 1.0m depth will be covered or have a ramp installed overnight to prevent any mammals becoming trapped. Commuting corridors around the outside of site will be retained.

Residual Impacts

- 5.7.3 The overall impact of the scheme will be **negligible, non-significant**.

5.8 Breeding Birds

Potential Impacts

- 5.8.1 In the absence of avoidance / mitigation, the development could result in the damage / destruction of a bird nest, and loss of small areas of foraging habitat for common birds. Impacts would be of minor impact magnitude and likely to occur.

Mitigation and Compensation

- 5.8.2 Clearance of any trees (*e.g. the taller scrub to the woodland edge, if clearance is required*) will be undertaken outside the bird nesting season (*season: March-August inclusive*). Should this not be possible, vegetation will be checked prior to removal by a Suitably Qualified Ecologist to ensure no active nests are present.

Residual Impacts

- 5.8.3 The overall impact of the scheme will be **negligible, non-significant**.

5.9 Invertebrates

Potential Impacts

- 5.9.1 The current habitat lacks floristic diversity or areas of standing / fallen deadwood which would support notable species of invertebrate. Notable invertebrate species are known to be present within the adjacent woodland, however this is being retained within the proposals. Given the small size of the site, impacts would be of very minor impact magnitude.

Mitigation and Compensation

- 5.9.2 Surrounding woodland will be retained within the scheme. Any deadwood found during site clearance will be carefully moved by hand to an area of retained habitat. Additional tree planting is proposed to replace those lost as a minimum, whilst bird boxes shall be installed to provide replacement nesting opportunities.

Residual Impacts

- 5.9.3 The overall impact of the scheme will be **negligible, non-significant**.

6.0 CONCLUSIONS

- 6.1 The existing site is formed of amenity grassland, hard / bare ground and scattered trees. The habitats within the proposed construction zone are of low ecological value.
- 6.2 No potential for protected species has been found on the site. Potential for bats has been identified in an off-site tree proposed for retention.
- 6.3 Once avoidance and mitigation measures for reptiles and breeding birds have been taken into account, the impacts of the planned development upon biodiversity will be **negligible, non-significant** with proposed replacement planting preventing any biodiversity losses on site.

7.0 REFERENCES

JNCC: Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit; (2003);

Collins J (ed): Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd ed.) The Bat Conservation Trust (2016);

Mitchell-Jones and McLeish: Bat Workers Manual; JNCC, 3rd Edition (2004);

Streeter, D.: The Most Complete Guide to the Flowers of Britain and Ireland; Harper Collins, London (2010);

www.magic.gov.uk.

Table No. 03 – Species List for Habitat Parcels**Amenity Grassland**

Common Name	Scientific Name	DAFOR
Broadleaved Dock	<i>Rumex obtusifolius</i>	O
Cleavers	<i>Galium aparine</i>	R
Cocksfoot	<i>Dactylis glomerata</i>	LA
Common Hogweed	<i>Heracleum sphondylium</i>	R
Creeping Buttercup	<i>Ranunculus repens</i>	F
Daisy	<i>Bellis perennis</i>	A
Dandelion	<i>Taraxacum officinale</i>	F
Dovesfoot Cranebill	<i>Geranium mole</i>	O
Field Mallow	<i>Malva Sylvestris</i>	R
Green Alkanet	<i>Pentaglottis sempervirens</i>	O
Ground Ivy	<i>Glechoma headrace</i>	O
Groundsel	<i>Senecio vulgaris</i>	R
Ivy	<i>Hedera helix</i>	R
Nettle	<i>Urtica dioica</i>	O
Pendulous Sedge	<i>Carex pendula</i>	R
Perennial Rye-grass	<i>Lolium perenne</i>	D
Smooth Sow-thistle	<i>Sonchus oleraceus</i>	R
Sorrel	<i>Rumex acetosa</i>	R
Spear Thistle	<i>Cirsium vulgare</i>	R
White Clover	<i>Trifolium repens</i>	O
White Deadnettle	<i>Lamium album</i>	R
Yorkshire Fog	<i>Holcus lanatus</i>	LA

Scattered Trees

Common Name	Scientific Name	DAFOR
Ash	<i>Fraxinus excelsior</i>	R
Cherry	<i>Prunus sp.</i>	R
Cherry Plum	<i>Prunus cerasifera</i>	R
Cider Gum	<i>Eucalyptus gunnii</i>	O
Hawthorn	<i>Crataegus monogyna</i>	O
Silver Birch	<i>Betula pendula</i>	R
Southern Blue Gum	<i>Eucalyptus globulus</i>	O
Whitebeam	<i>Sorbus aria</i>	R
Willow	<i>Salix sp.</i>	O

D – Dominant; A – Abundant; F – Frequent; O – Occasional; R – Rare; L – Locally

APPENDIX NO. 1 - SITE PHOTOGRAPHS



Photograph No. 01 - The tree T01 which offers 'moderate' bat roost potential.



Photograph No. 02 - View of the site looking north-east.

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APPENDIX NO. 1 - SITE PHOTOGRAPHS



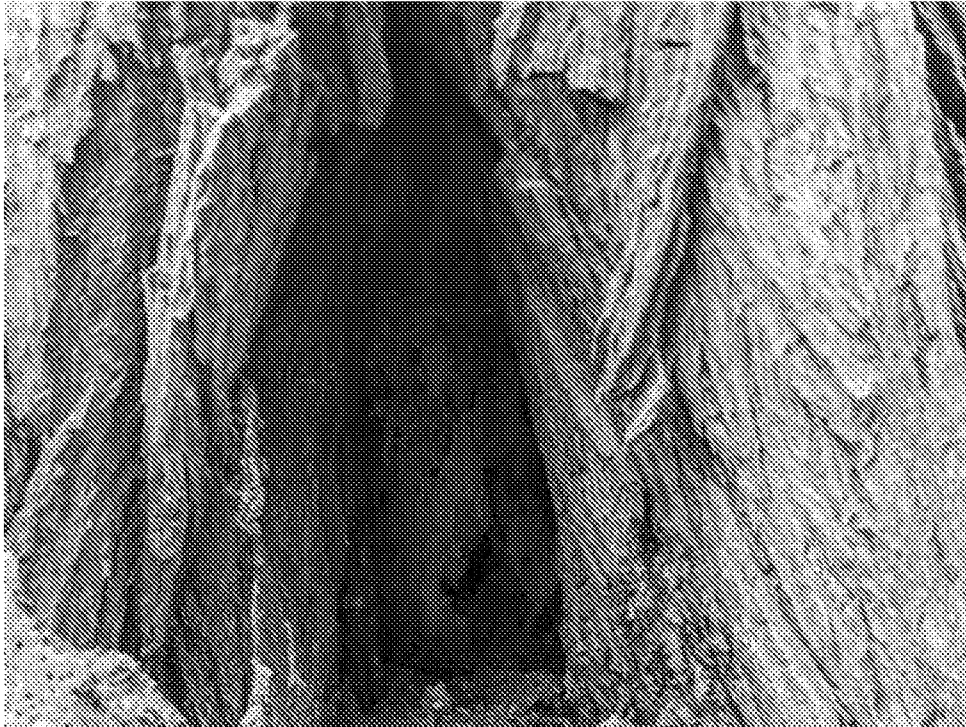
Photograph No. 03 - Small immature trees planted within the grassland, with a small pampas grass forming the only introduced shrubs on the site.



Photograph No. 04 - Limited introduced shrubs lean over the fence from the adjacent Barton Manor property.

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APPENDIX NO. 1 - SITE PHOTOGRAPHS



Photograph No. 05 - The cavity within T01 offering 'moderate' bat roost potential.



Photograph No. 06 - View of the site from the north, looking south.

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APPENDIX NO. 1 - SITE PHOTOGRAPHS



Photograph No. 07 - Tall ruderal and vegetation to the field margins.



Photograph No. 08 - A south-facing bank of spoil covered in tall ruderal vegetation.

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APPENDIX NO. 1 - SITE PHOTOGRAPHS



Photograph No. 09 - Pile of grass cuttings which could provide some habitat potential.



Photograph No. 10 - A pile of tree stumps is hidden under tall ruderal vegetation, providing habitat for a range of species.

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APPENDIX NO. 1 - SITE PHOTOGRAPHS



Photograph No. 11 - Rear of the Barnmead property, showing tennis court and introduced planting beds.



Photograph No. 12 - Amenity grassland, introduced shrubs and scattered trees within the Barnmead property.

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APPENDIX NO. 1 - SITE PHOTOGRAPHS



Photograph No. 13 - Hedgerow with emergent mature trees.



Photograph No. 14 - Hedgerow vegetation to the site boundary.

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APPENDIX NO. 1 - SITE PHOTOGRAPHS



Photograph No. 15 - Large mature trees to the site boundary are considered to offer 'low' bat roost potential.



Photograph No. 16 - A shallow dry ditch is situated within the grassland to the left of the photograph.

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APPENDIX NO. 1 - SITE PHOTOGRAPHS

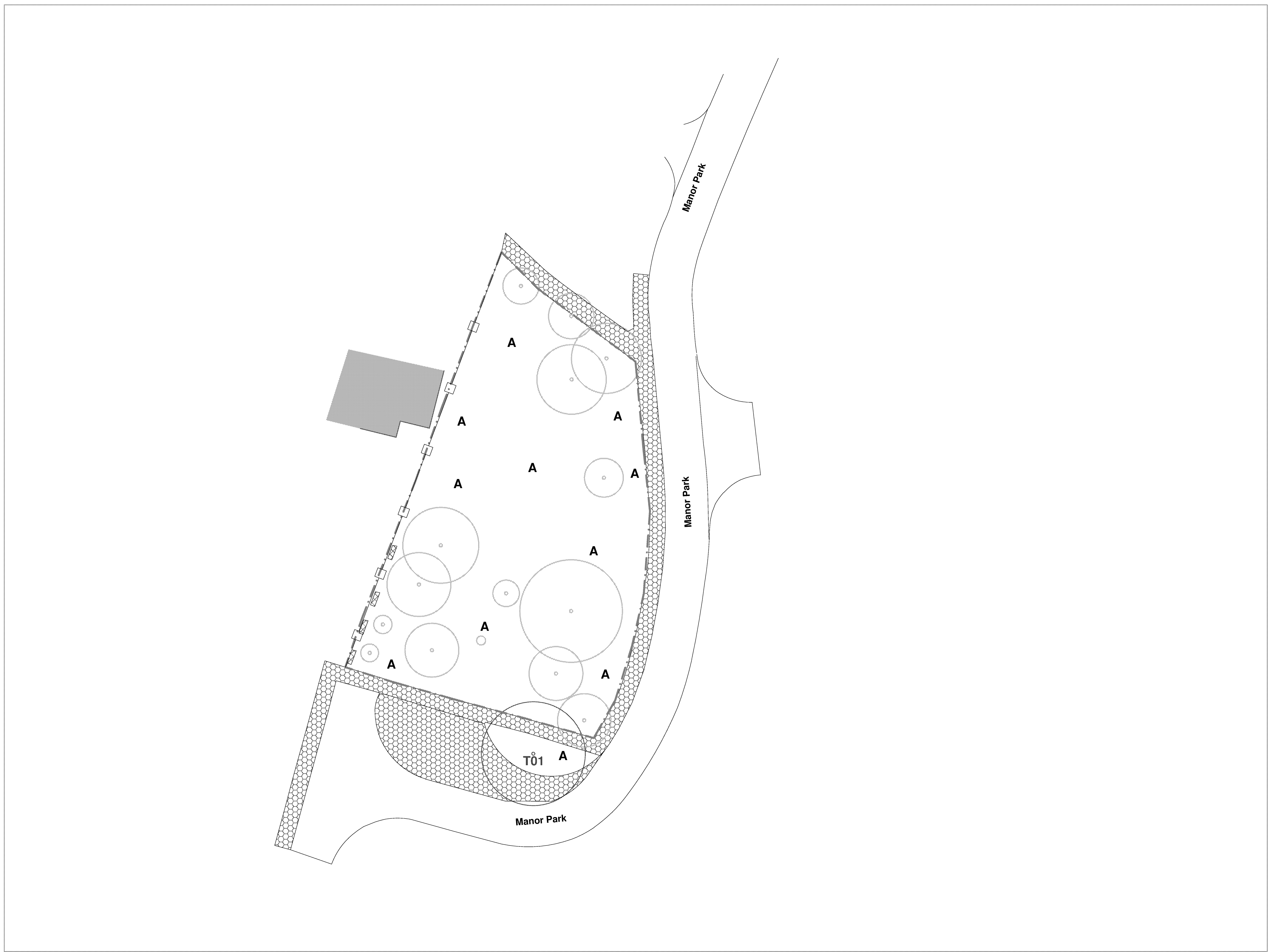


Photograph No. 17 - Mammal snuffle-holes within the improved grassland.



Photograph No. 18 - Holes within the site boundary were identified as rabbit and fox holes.

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Legend

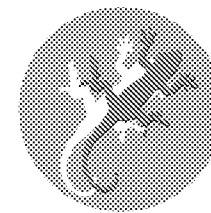
- Site Boundary.
- Existing Building.
- Amenity Grassland.
- A
- Fenceline.
- Hardstanding.
- Introduced Shrubs.
- Scattered Trees.
- Trees with Bat Roost Potential.
- T01

Notes: The original of this drawing was produced in colour - a monochrome copy should not be relied upon.

Habitat areas are indicative and for information only - please do not scale from this drawing.

Planning Issue

Rev	Description	Date	Initials
00	Planning Issue	12.02.20	WM



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Client
Ivon Blumer Architects Ltd
Project Title and Location
Manor Park
Nyetimber Lane, Bognor Regis

Drawing Title
Figure No.1 - Site Habitat Plan

Scale 1:200@A1	Drawn WM	Approved GS	Date 12.02.20
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Drawing No LLD-1899-ECO-FIG-001	Revision 00
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Figure No.1- Site Habitat Plan
Manor Park, Nyetimber Lane, Bognor Regis

