



HYBRID ECOLOGY LTD
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Low Impact EclA:

Land adjacent to Michaelstowe Drive, Ramsey

On behalf of:

Gareth Richardson

Prepared by:

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Report version control:

Version 1:

September 2020

Summary

Land adjacent to Michaelstowe Drive (the site) was visited on 16th September 2020 in response to a proposal for residential development. The proposal requires planning consent from Tendring Council and this report informs the planning submission. A summary of the ecological recommendations is provided below.

Legally protected species

- The boundary trees, hedgerow and scrub are likely to support nesting birds between March and August inclusive. Any work that could impact an active birds' nest will be carried out between September and February inclusive, or follow a nest check undertaken by an ecologist who confirms that nesting birds are absent from the habitat in question.

Habitats

- The oak tree on the southern boundary will be protected in accordance with British Standard (BS 5837: 2012) Trees in Relation to Design, Demolition and Construction – Recommendations. Specialist arboricultural advice will be sought where appropriate.
- It is recommended that the site is kept maintained to discourage wildlife colonisation ahead of development.
- Hedgerow removal will be compensated for, through replacement wildlife friendly planting.

Enhancement opportunities

The development has potential to provide enhanced opportunities for wildlife. There is scope to provide new planting and install habitat boxes around the site. These measures would contribute to Government aims under Paragraph 170(d) of the National Planning Policy Framework 2019 which requires all development to demonstrate measurable biodiversity net-gain.

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1.0 Introduction

Personnel:

- 1.1 This report has been prepared by Gemma Holmes; Consultant Ecologist at Hybrid Ecology Ltd. Gemma is a qualified ecologist with 12 years' experience in professional survey work and is an Associate member of the Chartered Institute of Ecology and Environmental Management. Gemma holds licences to survey for great crested newt and bats in the UK (Licence numbers 2015-19096-CLS-CLS and 2016-27305-CLS-CLS respectively).

Brief:

- 1.2 Gareth Richardson instructed Hybrid Ecology to produce a Low Impact EclA for Land adjacent to Michaelstowe Drive, Ramsey, Essex CO12 5ER. A Location Plan is provided in Figure 1 and Survey Boundary in Figure 2. The proposal involves residential development.

Aims:

- 1.3 This Low Impact EclA has been produced to advise the client/developer and relevant members of the project team as to the key ecological constraints and opportunities associated with this project and any necessary mitigation requirements to ensure legal obligations in respect of protected species, designated sites and habitats are met.

Figure 1. Location plan



Figure 2. Survey Boundary (approximate)



2.0 Planning Policy and Legislation

National Planning Policy Framework (2019): Conserving and Enhancing the Natural Environment

Please note the below policies have been taken directly from the National Planning Policy Framework.

Paragraph 170

2.1 Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans;
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

Paragraph 175 (d)

2.2 Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

Local Planning Policy: Tendring Local Plan (2007)

Please note the below policies have been taken directly from the above Local Plan.

Policy EN6 - Biodiversity

- 2.3 Development proposals will not be granted planning permission unless the existing local biodiversity and geodiversity is protected and enhanced. In exceptional circumstances, where the planning benefits are considered to outweigh the protection or enhancement of local biodiversity and geodiversity, appropriate compensating measures to outweigh the harm caused by the development must be provided. Where appropriate, conditions or planning obligations will be sought to protect the biodiversity interest of the site and to provide appropriate compensatory or mitigation measures and long term site management, as necessary.

Policy EN6a – Protected Species

- 2.4 Planning permission will not normally be granted for development which would have an adverse impact on badgers, seals or species protected by Schedules 1, 5 and 8 of the Wildlife and Countryside Act 1981, as amended.

Policy EN6b – Habitat Creation

- 2.5 Consideration will be given to the potential for new wildlife habitats in new development. Where these are created, measures may be taken to ensure suitable permanent management, and public access. In these matters, the Council may be guided by the Essex Biodiversity Action Plan.

Policy EN11a - Protection of International Sites: European Sites and Ramsar Sites

- 2.6 Development, which may affect a European Site, a proposed European Site or a Ramsar site, will be subject to the most rigorous examination. Development that is not directly connected with or necessary to the management of the site for nature conservation, which is likely to have significant effects on the site (either individually or in combination with other plans or projects) and where it cannot be ascertained that the proposed would not adversely affect the integrity of the site, will not be permitted unless: i. There is no alternative solution; ii. There are imperative reasons of over-riding public interest for the development; and iii. And in the event that (i) and (ii) above are met, an appropriate compensatory habitat is provided.
- 2.7 Where the site concerned hosts a priority natural habitat type and/or a priority species, development or land use changes will not be permitted unless the Council is satisfied that it is necessary for reasons of human health or public safety or for beneficial consequences of primary importance for nature conservation.

Policy EN11b – Protection of National Sites: Sites of Special Scientific Interest, National Nature Reserves, Nature Conservation Review sites, Geological Conservation Review sites

- 2.8 Development in or likely to affect Sites of Special Scientific Interest will be subject to special scrutiny. Where such development may have an adverse effect, directly or indirectly on the special interest of the site it will not be permitted unless the reasons for the development clearly outweigh the nature conservation value of the site itself and the national policy to safeguard such sites. Where the site concerned is a National Nature Reserve (NNR) or a site identified under the Nature Conservation Review (NCR) or Geological Conservation Review (GCR) particular regard will be paid to the individual site's national importance. Where development is permitted the Council will consider the use of conditions or planning obligations to ensure the protection and enhancement of the site's nature conservation interest.

Policy EN11c – Protection of Local Sites: Local Nature Reserves, County Wildlife Sites, Regionally Important Geological/Geomorphological Sites

- 2.9 Development likely to have an adverse effect on a Local Nature Reserve, a County Wildlife Site or a Regionally Important Geological/ Geomorphological Site, will not be permitted unless it can be clearly demonstrated that there are reasons for the proposal which outweigh the need to safeguard the substantive nature conservation value of the site. In all cases where development is permitted which would damage the nature conservation value of the site or feature, such damage will be kept to a minimum. Where appropriate the Council will consider the use of conditions and/or planning obligations to provide appropriate mitigation and compensatory measures.

Legislation: Protection of Designated Sites, Habitats and Species

Please note this section is a summary of legislation only and should not be taken as a definitive interpretation of any law.

European sites

- 2.10 Legal protection prevents damaging activities on designated sites. Some of the sites, known as Special Protection Areas (SPAs) are specifically designated for birds and Special Areas of Conservation (SACs), are of European importance for certain species (e.g. barbastelle bat). These sites have been created under the EC Birds Directive and Habitats Directive. In the UK they form part of a larger European network called Natura 2000.
- 2.11 Most residential development sites in Essex (excluding Epping and Harlow districts), within a certain Zone of Influence (Zoi) of European designated sites require consideration under the “Essex Coast Recreational Avoidance and Mitigation Strategy” (or Essex Coast RAMS). This requires a per-unit financial contribution to offset impacts related to recreation at coastal sites.

Nationally protected sites

- 2.12 Within the UK sites that are nationally important for plants, animals or geological or physiographical features are protected by law as Sites of Special Scientific Interest (SSSIs). This system provides the underpinning statutory protection for all sites, including those which are also of international importance.

Locally designated sites

- 2.13 Local authorities for any given area may designate certain areas as being of local conservation interest. The criteria for inclusion, and the level of protection provided, if any, may vary between areas. Most individual counties have a similar scheme, although they do vary. These sites, which may be given various titles such as ‘Local Wildlife Sites’ (LWS), ‘Local Nature Conservation Sites’ (LNCS), ‘Sites of Importance for Nature Conservation’ (SINCs), or ‘Sites of Nature Conservation Importance’ (SNICIs), together with statutory designations, are defined in local and structure plans under the Town and Country Planning system and are a material consideration when planning applications are being determined.

Hedgerows

- 2.14 The Hedgerow Regulations (1997) is a piece of legislation designed to protect countryside hedges. The criteria include length, number of woody species and associated features (including wet ditches). The legislation prevents the intentional or reckless removal of an “important” hedgerow. Applications to remove hedgerows can be issued to the Local Planning Authority who may then issue a Hedgerow Removal Notice. From an ecological perspective, all hedgerows hold value for a huge range of wildlife. Hedgerows should be retained and protected throughout the lifetime of a development wherever possible and managed to secure long term viability.

Legally protected species

- 2.15 The Conservation of Habitats and Species Regulations (2016) affords protection to bats (all species), great crested newt, otter and dormouse (this is not an exhaustive list and is relevant to East Anglia only). The Wildlife and Countryside Act 1981 (as amended) is the main source of legal protection for wildlife in England and was strengthened by the Countryside and Rights of Way Act 2000.
- 2.16 Species protection is provided under Schedules 1, 5, 6 and 8 to species including bat, great crested newt, water vole, otter and nesting birds. Badgers are protected separately under the Protection of Badgers Act (1992).

Species and Habitats of Principal Importance in England (or Priority habitats/species)

- 2.17 The Natural Environment and Rural Communities Act (2006) places a duty on Local Planning Authorities to conserve and enhance certain habitats and species. The species that have been designated to be of "principal importance for the purpose of conserving biodiversity" are those that are most threatened, in greatest decline, or where the UK holds a significant proportion of the world's total population. They mainly derive from lists originally drawn up for the UK Biodiversity Action Plan (UK BAP). Similarly, the list of habitats of principal importance in England also derive from the UK Biodiversity Action Plan.

3.0 Methodology: Desktop Study

Mapping exercise

- 3.1 Aerial imagery (Google Earth Pro, 2019) was used to examine the landscape context of the site in relation to significant ecological assets such as woodland, established hedgerows, grassland and any naturalised features that would allow wildlife use and dispersal.
- 3.2 Multi-Agency Geographical Information for the Countryside (MAGIC) was used to identify any land designated for nature conservation reasons within 2km of the site, or within the Zone of Influence of Essex Coastal sites. Designated sites include Ramsar, Special Areas of Conservation (SAC), Special Protection Areas (SPA), Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) and Local Nature Reserves (LNR). MAGIC was also used to identify any areas of land mapped by Natural England as Priority Habitat.

Biological Records Search

- 3.3 Essex Field Club (EFC) was instructed to carry out a search of records for protected and priority species within a 1km radius of the site. Data records are included in the protected species evaluation in Section 8.

4.0 Methodology: Habitats and Species

Phase 1 Habitat Survey

- 4.1 An Extended Phase 1 Habitat Survey was carried out on 16th September 2020 by ecologist Gemma Holmes (BSc Hons ACIEEM). The survey included the red line in Figure 2 and up to 30 metres beyond the site boundaries, where accessible. The weather conditions were conducive to surveying, with good visibility, no wind and no rain. The survey was undertaken in accordance with the Handbook for Phase 1 Habitat Survey (JNCC 2010). Habitats on and adjacent to the site were mapped and target notes added for any interesting or notable biodiversity features.

Protected/priority species scoping

- 4.2 The survey also included an assessment of the site's potential to support any legally protected species; or Species and Habitats of Principal Importance, as identified by Section 41 of the Natural Environment and Rural Communities Act (2006). Where best practice guidelines exist, these have been used to assess the likelihood that individual species will be present, for example Bat Surveys: Good Practice Guidelines (BCT 2016) and Habitat Suitability Index for Great Crested Newt (Oldham et al, 2000).

Evaluation criteria

- 4.3 Features (conservation sites, habitats, and species) were evaluated where possible in relation to a geographical context (i.e. International, National, Regional, Metropolitan, County, District, Borough, Local and Site), in accordance with CIEEM Ecological Impact Assessment Guidelines (2016). Criteria include designations, quality of habitat in relation to the site context, ability to support notable assemblages of species, contribution to habitat connectivity, dispersal opportunities or providing intrinsic ecological value.

5.0 Limitations

- 5.1 Whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment. Wildlife is transient and mobile, and results of a survey can reasonably vary from one day to the next or across the seasons.
- 5.2 The protected species assessment provides a view of the likelihood of protected species occurring on the site based on the known distribution of species in the local area and the suitability of the habitat. However, it should not be taken as providing a full and definitive survey of any protected species/group.
- 5.3 Biological records can be patchy, and some areas/species are under recorded, therefore absence of records for a species or group does not necessarily mean that there is a lack of ecological interest. Equally, the presence of records does not necessarily mean the habitat is still suitable for the species/group in question.
- 5.4 This report is valid for 18 months, after which point habitats are reasonably expected to have changed to warrant a re-survey.

6.0 Results: Desktop Study

Landscape context

- 6.1 The site is situated in a rural position to the east of Ramsey in Essex. Harwich is 2km to the east of the site. The Stour and Orwell Estuaries are 1km to the north of the site at their closest point. Residential development lies to the immediate north and south, with arable land beyond. Grazing paddocks exist beyond Michaelstowe Drive to the west.

Designated sites and Priority Habitats

- 6.2 Please refer to the map in Figure 3. The site is not the subject of a conservation designation nor does it adjoin a European or nationally/locally designated site. There are conservation designations and Priority habitats locally which are described in Table 1 and Table 2 overleaf.

Sites evaluation: Development is confined within an arable land parcel and will not impact off-site designations or Priority Habitats. Due to the proximity to Essex Coast Habitats Sites, a per-unit financial contribution (likely £122.30) will need to be paid to Tending Council to compensate for recreational impacts. This is set out in the Essex Coast Recreational Avoidance and Mitigation Strategy (Essex Coast RAMS). This would be secured via a Section 106 or similar legal agreement.

Table 1. Designated sites within 2km

Site	Designation(s)	Distance	Reasons for notification (citation)
Little Oakley Channel Deposit	Site of Special Scientific Interest	0.84km, south	Little Oakley Channel Deposit provides a reserve of Pleistocene interglacial channel-fill sediments, unique in Britain, and currently attributed to part of the Cromerian complex of interglacials recognised in the Netherlands. Excavations and borings at Little Oakley have yielded abundant faunal and floral remains, including numerous mammalian bones (many of extinct species), molluscs, ostracods, as well as a fine pollen record. The site is of great importance for Quaternary studies, not only because it seems to represent an early Middle Pleistocene interglacial unknown elsewhere in Britain, but also because it is associated with the early Thames drainage system, and therefore assists in the establishment of a link between the Pleistocene successions in the Thames Valley and East Anglia.
Stour and Orwell Estuaries	Ramsar, Site of Special Scientific Interest	1km, north	The Stour and Orwell Estuaries are nationally important for 13 species of wintering waterfowl and three species on autumn passage. The estuary is also of national importance for coastal saltmarsh, sheltered muddy shores, two scarce marine invertebrates and a vascular scarce plant assemblage. The Stour Estuary includes three nationally important geological sites. These provide exposures of early Eocene sediments containing the volcanic ash formations between Harwich and Wrabness. The same rocks are also important for the fossil fruits and seeds that they contain.
Hamford Water	Special Protection Area	2km, south-east	Hamford Water is a tidal inlet whose mouth is about three miles south of Harwich. It is a large and shallow estuarine basin comprising tidal creeks, intertidal mud and sand flats, saltmarshes, islands, beaches and marsh grasslands. The site is of international importance for breeding Little Terns and wintering Dark-bellied Brent Geese, wildfowl and waders, and of national importance for many other bird species. It also supports communities of coastal plants which are rare or extremely local in Britain, including Hog's Fennel <i>Peucedanum officinale</i> which is found elsewhere only in Kent.

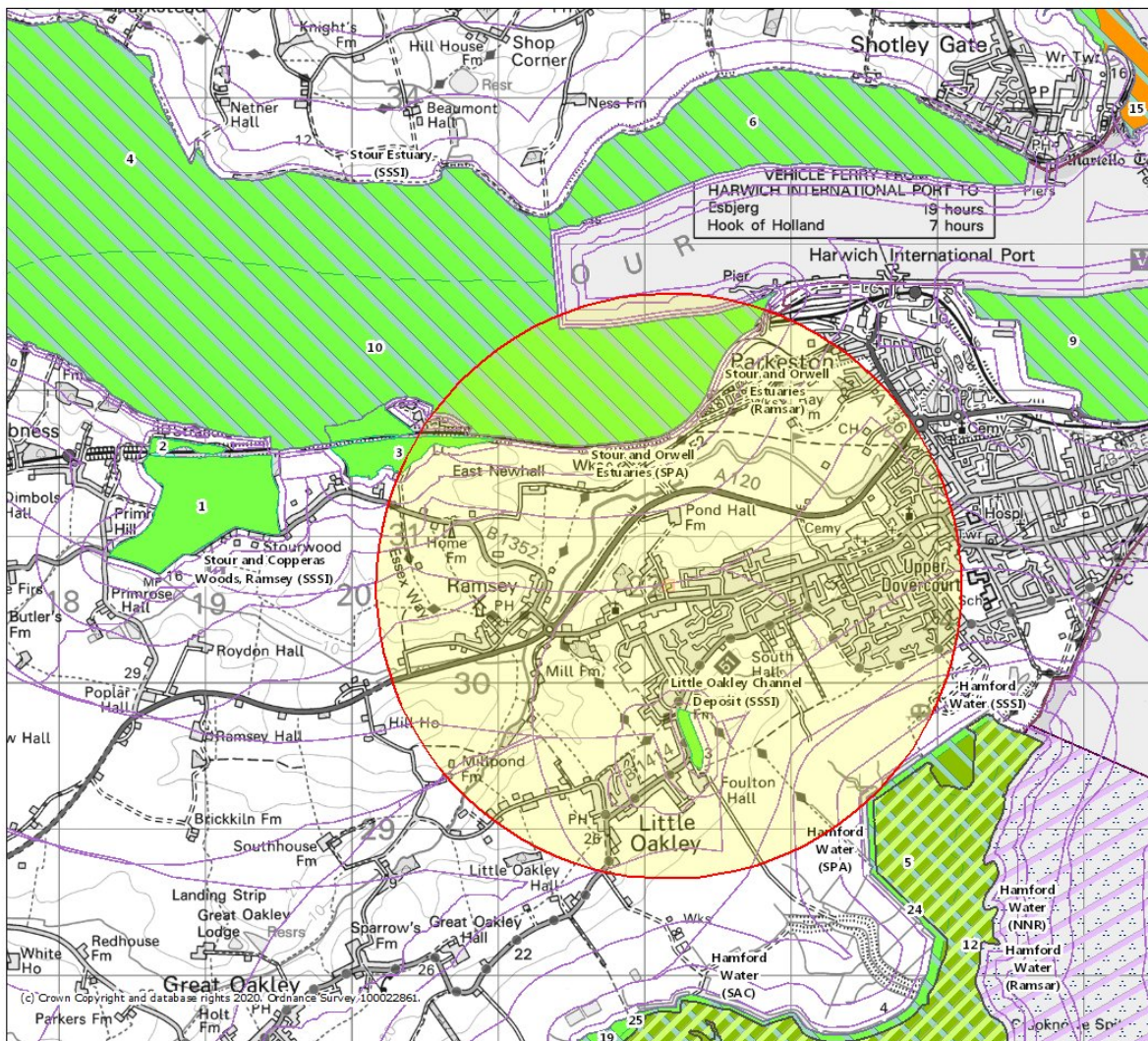
Table 2. Priority habitats within 250 metres

Habitat	Distance	Description
Wood-pasture and parkland	10 metres, west	There is an area of lowland deciduous woodland and wood-pasture beyond Michaelstowe Drive to the west of the site. This is currently used as grazing for horses.

Figure 3. MAGIC map showing designated sites within 2km

MAGiC

Magic Map

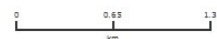


Legend

- Local Nature Reserves (England)
- National Nature Reserves (England)
- National Nature Reserves (Scotland)
- National Parks (England)
- Ramsar Sites (England)
- Proposed Ramsar Sites (England)
- Sites of Special Scientific Interest Units (England)**
- Favourable Condition
- Unfavourable Recovering
- Unfavourable no change
- Unfavourable Declining
- Part Destroyed
- Destroyed
- Not Assessed
- Sites of Special Scientific Interest (England)
- SSSI Impact Risk Zones - to assess planning applications for likely impacts on
- SSSIs/SACs/SPAs & Ramsar sites (England)
- Special Areas of Conservation (England)
- Possible Special Areas of Conservation (England)
- Special Protection Areas (England)
- Potential Special Protection Areas (England)
- Biosphere Reserves (England)

Projection = OSGB36
 xmin = 515400
 ymin = 228700
 xmax = 626700
 ymax = 233500

Map produced by MAGIC on 23 September, 2020.
 Copyright resides with the data suppliers and the map must not be reproduced without their permission. Some information in MAGIC is a snapshot of the information that is being maintained or continually updated by the originating organisation. Please refer to the metadata for details as information may be illustrative or representative rather than definitive at this stage.



7.0 Results: Phase 1 Habitat Survey

A plan with Target Notes is in Figure 4. Photographs from the site visit are provided in Figure 5. For full details on legally protected species, please refer to Section 8. Latin names appear in the text once.

Arable/disturbed ground

- 7.1 The site consists of ex-arable land which is now covered with bare ground, scattered scrub and weeds, including bramble *Rubus fruticosus agg.*, fat hen *Chenopodium album*, scented mayweed *Matricaria recutita*, field bindweed *Convolvulus arvensis*, dock *Rumex sp.*, creeping thistle *Cirsium arvense*, bristly oxtongue *Helminthotheca echioides*, couch grass *Elymus repens*, perennial rye grass *Lolium perenne*, green alkanet *Pentaglottis sempervirens*, borage *Borago officinalis* and St. John's wort *Hypericum perforatum*.

Species poor hedgerow/scrub

- 7.2 A species-poor unmanaged/outgrown hedgerow exists along the western boundary. It comprises of elm *Ulnus procera*, hawthorn *Crataegus monogyna*, dogrose *Rosa canina*, sycamore *Acer pseudoplatanus*, field maple *Acer campestre*, *prunus sp.*, and several dead elm trees interspersed with bramble scrub, which is encroaching to the south-east. Self-seeded sycamore trees exist beyond the wire mesh boundary fence. It is likely that the hedgerow will need to be severed/removed for access purposes.
- 7.3 The north-western corner of the site contains butterfly bush *Buddleia*, honeysuckle and cherry laurel *Prunus laurocerus*.
- 7.4 Beyond the site's eastern boundary is a dense stand of bramble scrub.

Individual trees

- 7.5 There is a mature ivy-clad oak *Quercus robur* tree in the centre of the southern boundary. This is a prominent tree and every effort will be made to retain and protect this in any future development. This is likely to require specialist arboricultural input to ensure roots are protected.

Improved grassland

- 7.6 There is an improved grass margin to the south of the site, which consists of perennial rye grass, couch grass, common nettle *Urtica dioica* and black mustard *Brassica nigra*.

Habitats evaluation: There is no irreplaceable or otherwise noteworthy habitat that will be affected by the work. The oak tree is a prominent ecological feature and is likely to support a range of wildlife, warranting it's protection. Notwithstanding, all habitats are considered to be important at Site level only.

Figure 4. Target Notes



Target Note	Description
1	Species poor hedgerow/scrub to the west.
2	Disturbed ex arable land.
3	Off-site dense scrub.
4	Mature oak tree, significant on-site feature warranting protection.
5	Improved grassland margin.

Figure 5. Photographs



a) Western boundary hedgerow/scrub



b) Southern boundary improved grassland margin.



c) Mature oak tree to the south of the site. Advise retain and protect with appropriate measures.



d) Dense scrub beyond the eastern boundary.

8.0 Results: Protected/Priority Species Scoping

Bats

Data records:

- 8.1 The closest bat records to the site are brown long-eared bat (0.2km), common pipistrelle (0.9km) and soprano pipistrelle (1.1km).

Habitat requirements:

- 8.2 Bats roost in buildings, trees and underground sites. Buildings with large, uncluttered loft voids, external crevices (e.g. hanging tiles, fascias, weatherboarding) and missing roof tiles are often suitable, particularly when a building is close to a foraging resource – e.g. woodland or water. Trees with cavities, woodpecker holes, hazard beams and flaking bark are also suitable for roosting.

Assessment:

Buildings

- 8.3 There are no buildings on the site.

Trees

- 8.4 There are no trees on the site with potential roost features.

Foraging/commuting

- 8.5 The site offers little to foraging/commuting bats and is unlikely to represent a significant resource for either behaviour. Notwithstanding, small numbers of common bat species foraging along boundaries cannot be ruled out, particularly given the close proximity to the woodland to the west.
- 8.6 To ensure bat foraging behaviour is not impacted, any lighting scheme will ensure that all vegetated boundaries, particularly the western boundary are not lit, and that any lighting is focused away from retained vegetation.

Outcome: Further survey is not required.

Great crested newt

Data records:

- 8.7 There are no great crested newt records within a 2km radius of the site.

Habitat requirements:

- 8.8 Great crested newt (GCN) require both terrestrial and aquatic habitats. They return to aquatic habitat to breed March-June, using small to medium ponds with no fish and suitable marginal vegetation including watercress and float grass (Froglife 2001). Terrestrial habitat includes refuges and foraging and dispersal opportunities as well as hibernation sites such as rubble piles or mammal burrows. It is rare to find GCN over 250 metres from a breeding pond (Cresswell & Whitworth 2004).

Assessment:

- 8.9 There are no ponds on the site or within 250 metres (Ordnance survey via MAGIC). The on site habitat consists of arable/disturbed ground which is usually an unsuitable receptor, furthermore there is no onward habitat connectivity in any direction. Taking all factors into consideration, it is unlikely that terrestrial great crested newt would be present on the site.

Outcome: Further survey is not required.

Dormouse

Data records:

- 8.10 The closest dormouse record is 1.2km from the site.

Habitat requirements:

- 8.11 The hazel dormouse requires wooded habitats, usually semi-natural woodland containing hazel coppice and oak, and a rich understorey cover through which to disperse safely between trees (English Nature 2006).

Assessment:

- 8.12 The habitat on site consists of ex-arable/disturbed ground which is unsuitable for this species. The hedgerow to the west is unmanaged, offers little in the way of species diversity and lacks onward habitat connectivity.

Outcome: Further survey is not required.

Otter and water vole

Data records:

8.13 Water vole records exist 2km from the site. No otter records were returned.

Habitat requirements:

8.14 Both species require flowing water, deep enough to support foraging behaviour and with connectivity into the wider landscape.

Assessment:

8.15 There is no suitable habitat on or adjacent to the site.

Outcome: Further surveys are not required.

Reptiles

Data records:

8.16 Records were returned for grass snake (0.2km), common lizard (1km) and slow worm (1.4km).

Habitat requirements:

8.17 Reptiles (common lizard, slow worm, grass snake and adder) require mosaic habitats with features in which to bask, forage and shelter. These habitats need to have onward connectivity for dispersal. Suitable habitats include grassland with scrub edges or small woodland coppices (Edgar et al. 2010).

Assessment:

8.18 The site consists of scattered weeds with only peripheral habitats (such as the southern margin) that could be suitable for supporting this species group. Whilst the occasional slow worm cannot be ruled out in the wider landscape (e.g. off-site gardens) the land-use and history of management is likely to discourage colonisation.

Outcome: Further survey is not required.

Birds

Data Records:

8.19 Several records for Schedule 1 bird species have been returned within a 1km radius of the site. They include black tern, red kite, pintail and golden eye. Priority species recorded locally include yellowhammer, reed bunting and house sparrow.

Habitat requirements:

8.20 Nesting birds use buildings, scrub and trees between March and August inclusive (note some species including pigeon will nest all year round).

Assessment:

- 8.21 There is no habitat on site suitable for supporting Schedule 1 listed bird species (i.e. those species with elevated legal protection). The site has high potential to support generalist nesting birds in trees and hedgerows. House sparrows were seen sheltering/foraging in bramble scrub off-site to the east.

Outcome: Further survey is not required. Any required tree work or hedgerow management will be undertaken between September and February inclusive, to avoid the nesting period. If this is not possible, an ecologist can carry out a check for active nests immediately prior to work commencing.

Badger

Data records:

- 8.22 Badger records were returned 0.2km from the site.

Habitat requirements:

- 8.23 Badger is a widespread, common mammal and is legally protected due to persecution rather than rarity or conservation significance. European badger requires habitats in which to build their setts and in which to forage. Badgers preferentially choose sloping banks (road verges, railway embankments, woodlands) with easy-dig substrate for sett building where foraging habitat is available.

Assessment:

- 8.24 No badger setts, or any other signs alluding to use of the site by badger were identified on the site. Rabbit droppings were identified in the centre of the site, but no warrens were present.

Outcome: Further survey is not required.

Legally protected plants/invertebrates

Data Records:

- 8.25 No records for notable plants or insects were returned for the site.

Assessment:

- 8.26 The site does not contain any significant invertebrate habitat, and there are no habitats on the site that could reasonably support rare or notable plant species.

Outcome: Further survey is not required.

Species evaluation: With the exception of nesting birds, there is not a reasonable likelihood of protected or priority species being present and further survey is not required. The species presence on site is considered to be relevant at Site level only.

9.0 Ecological Constraints and Opportunities

Avoidance measures and mitigation

Nesting birds

- 9.1 All nesting birds receive basic legal protection from killing and injury. Any required tree work/hedgerow management will be carried out between September and February inclusive unless a check for active nests has been completed by an ecologist immediately beforehand and the habitat in question deemed clear of inactive nests. Any active nests found must be left undisturbed with a 5 metre buffer until the young have fledged.

Tree protection

- 9.2 The mature oak tree to the south of the site is an aged specimen and warrants retention in any development scheme. Protection will be in accordance with British Standard BS 5837 (2012) Trees in Relation to Design, Demolition and Construction – Recommendations. It is recommended that specialist arboricultural input is sought for any below ground work that could impact roots.

General habitat maintenance

- 9.3 The site will be maintained until such point as development starts, to discourage wildlife colonisation.

Compensation

- 9.4 There is likely to be a loss of a species-poor hedgerow/scrub to the west of the site. This will be compensated for through replacement planting elsewhere on the site, potentially the eastern boundary. Species should be native and wildlife friendly, and could include hawthorn, hazel, hornbeam, beech, holly and guelder rose.

Opportunities

Biodiversity net-gain is now mandatory under Paragraph 170(d) of the National Planning Policy Framework (2019) and recommended under Policy EN6b of the Tendring Local Plan.

New planting

- 9.5 Where space allows, the development could include planting of small trees that are beneficial to wildlife, such as apple, cherry, hazel and amalanchier. Nigh-scented shrubs such as honeysuckle and nightshade would improve foraging opportunities for bats.

Habitat boxes (Recommended boxes are provided in Appendix 1)

- 9.6 There is scope to install bat roost boxes around the site to improve opportunities for nesting birds and bats. It is recommended that the following bat roost boxes/features are included:
- One integrated feature/box on a south-facing external wall.
 - Two bat boxes on the retained mature oak tree.

Note: Bat roost features should be sited as high as possible, away from external lighting with immediate connectivity into natural habitats.

- 9.7 Two woodcrete/woodstone house sparrow terraces and one generalist open-fronted bird box (suitable for a range of species including spotted flycatcher, robin and wren) will be installed on new properties. Bird boxes should be located at a height of at least 2m, and face between north and east.

Permeable fencing

- 9.8 Residential development can result in the severance of garden habitats for nocturnal mammals, including the hedgehog, a Priority Species. To remedy this, any garden fences will be made permeable to nocturnal mammals. This can be achieved by allowing a 13cm x 13cm square at ground level.

10.0 Conclusions

- 10.1 The survey has established ecological constraints to developing the site and identified opportunities that new development could bring. The site is not designated for any conservation reason and does not contain any Priority Habitat.
- 10.2 Since no evidence of, or potential for any legally protected species was found on the site, there is not a reasonable likelihood of impact to warrant any further survey requirement. Mitigation measures are required to ensure any nesting birds on site are given appropriate protection in accordance with wildlife legislation. The oak tree will be protected in accordance with best practice and the applicant will seek specialist arboricultural advice where it is needed.
- 10.3 The development presents an opportunity to implement enhancement measures such as new planting and habitat boxes for roosting bats and nesting birds, which will increase the wildlife value of the site post-development. These measures will also ensure compliance with the requirement for measurable “biodiversity net-gain” and provide new habitat opportunities in accordance with Paragraph 170(d) of the National Planning Policy Framework 2019 and Policy EN6b of the Tendring Local Plan.

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Appendix 1. Recommended habitat features

Integrated bat roost features for buildings:



Bat access tile (<https://www.nhbs.com/bat-access-tile-set>)



Habibat 003 Built in Bat Box faced with red brick. Dimensions 44 x 21.5 x 10.2 cm plus facing bricks. Self cleaning.



Schwegler 1FR Bat Tube, to be integrated into building wall, and either bricked in or rendered. Self cleaning. Dimensions: 47.5 x 20 x 12cm.



Sparrow terrace (<http://www.wildlifeservices.co.uk/nestboxes/sparrowterrace.jpg>)



Open fronted nest box (<https://www.nhbs.com/vivara-pro-barcelona-woodstone-open-nest-box>)