



Shadow Habitat Regulations Assessment and Statutory Designated Sites Impact Assessment

Land at Brook Farm, Daws Heath, Hadleigh, Essex

**On Behalf of:
Countryside Partnerships**

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Site assessments / surveys (where required) have been restricted to a level of detail required to achieve the stated objectives of the work.

Due to the temporal nature of ecology, the findings of this report should not be relied upon if a significant amount of time has passed

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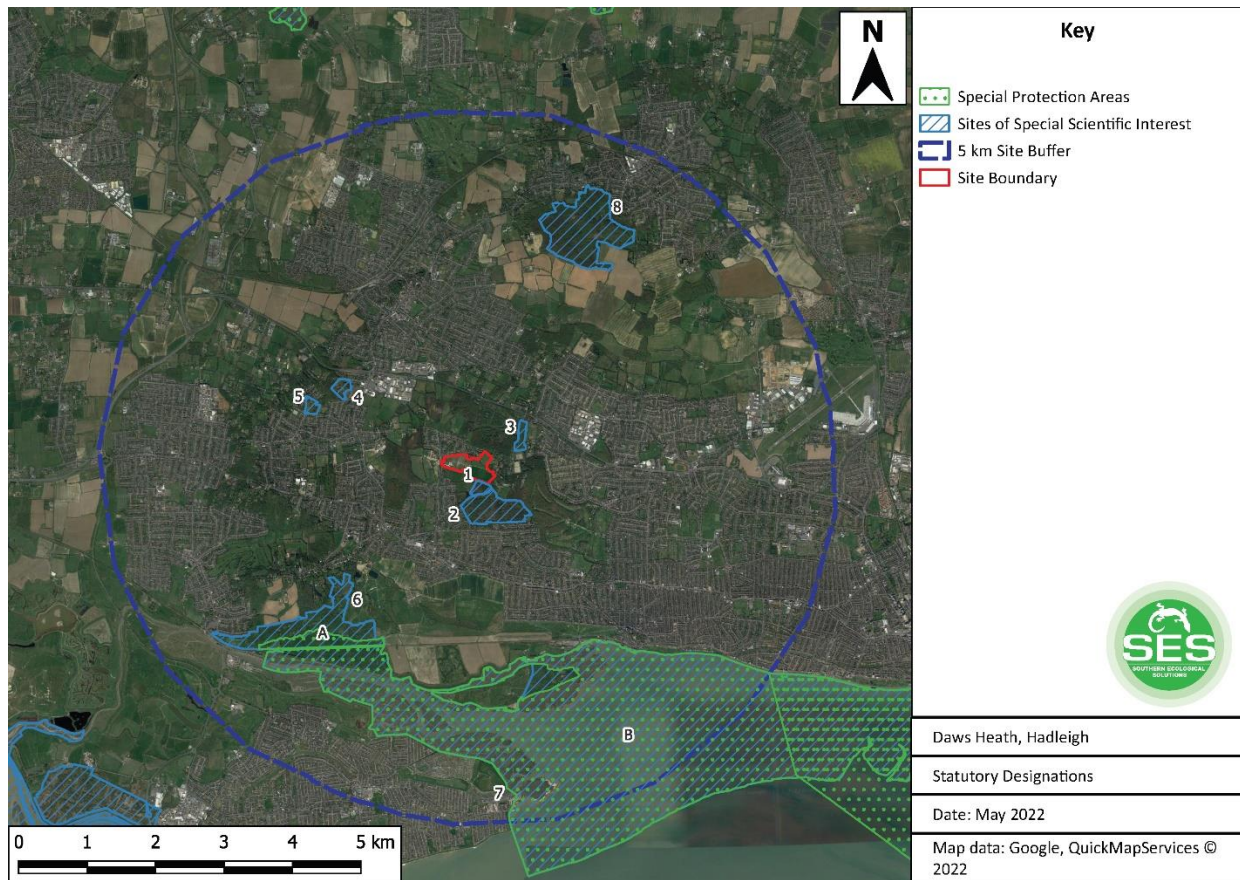
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1.0 Introduction

Purpose

- 1.1** This report has been prepared to support Castle Point Borough Council Appropriate Assessment and decision-making process, as the competent authority under the Conservation of Habitats and Species Regulations 2019 (as amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019) (Habitat Regulations, 2019), in relation to Countryside Properties UK proposals for residential development at Brook Farm, Daws Heath (the site). This shadow HRA report relates to potential impacts on sites protected under the Habitats Regulations (2019) including Special Protection Areas (SPA) and Special Areas of Conservation (SAC), which are European designated sites (Natura 2000 Sites) and Ramsar Wetlands of International Importance (Ramsar sites), and species and habitats which are listed as qualifying features in the citations of these designated sites. Together these are referred to as 'protected sites.'
- 1.2** This report also assesses potential impacts and sets out mitigation proposals for Great Wood and Dodd's Grove and Garrold's Meadow Site of Special Scientific Interest (SSSI) which are afforded protection under the Wildlife and Countryside Act 1981 (as amended).
- 1.3** The proposed development is draft allocated within the Local Plan for housing development. The proposed development is for the construction of 173 new dwellings including Public Open Space, Landscaping, Access, Drainage, Parking, Servicing, Utilities and all associated infrastructure and ancillary Buildings. The proposed development area will cover approximately 18.9ha with the development area c.6ha and with over 10ha for use as informal greenspace provision. The landscape proposals are shown within Appendix 1.
- 1.4** The residential dwellings will be accessed from a new connection onto Daws Heath Road to the west. The access point will only serve the proposed development and is not intended to connect in highway terms either now or in the future to other housing. There will be footpath connections offsite to the north on Bramble Road and also to Daws Heath Road to the west.
- 1.5** The site location and designated site's location(s) are provided in Figure 1 below.

Figure 1: Site Location and Designated Site Plan



Background to HRA Process

1.6 The HRA process is a four-stage stepwise process to ensure that there are no direct or indirect impacts on protected sites integrity (qualifying habitats or species) arising from a proposed development. In summary these are:

- **Stage 1 – Screening:** To test whether a plan or project either alone or in combination with other plans and projects is likely to have a significant effect on a protected site;
- **Stage 2 – Appropriate Assessment:** To determine whether, in view of a protected site's conservation objectives, the plan, either alone or in combination with other projects and plans, would have an adverse effect, or even a risk of this, on the integrity of the site with respect to the site structure, function and conservation objectives. If adverse impacts are anticipated, potential mitigation measures to alleviate impacts should be proposed and assessed;
- **Stage 3 – Assessment of Alternatives:** Where a plan is assessed as having an adverse impact, or risk of this, on the integrity of an international site even with mitigation in place, there should be an examination of alternatives such as alternative locations and designs of development; and,
- **Stage 4 – 'IROPI':** Final stage assessment where there are no alternative solutions and where adverse impacts remain. Only where there are 'imperative reasons of overriding public interest (IROPI), compensatory measures may be agreed and provided to offset adverse impacts and so maintain the overall coherence of the site or integrity of the Habitat Regulations (2019) site network.

- 1.7** A European court ruling (Court of Justice of the European Union (ECJ) on the interpretation of the Habitats Directive in the case of People Over Wind and Sweetman vs Coillte Teoranta (date: April 2018, ref: C 323/17)) determined mitigation measures cannot be considered when deciding whether a plan or project is likely to have a significant effect on a Habitat Regulations site. A competent authority must therefore take account of measures intended to avoid or reduce the harmful effects of a plan or project as part of the Appropriate Assessment. Only then can a conclusion be drawn as to whether the plan or project will have an adverse effect on the integrity of the site. This overruled the prior approach under English law that incorporated mitigation and avoidance measures that could (and should) be considered at the screening stage when judging the likelihood of a significant effect. Although the UK is no longer subject to new ECJ rulings since 31 December 2020, ECJ rulings prior to this date are still binding under the EU Withdrawal Act.
- 1.8** Natural England is the government's adviser for the natural environment in England. As a statutory consultee in the planning and environmental assessment processes they provide advice to planning authorities to support them in making plans and decisions that conserve and enhance the natural environment and contribute to sustainable development. Local Planning Authorities are responsible for undertaking Habitats Regulations Assessment/Appropriate Assessment for plans and projects which have the potential to adversely affect Habitats sites.
- 1.9** The first two steps in the HRA sequential process are relevant to the current proposal and these are the screening and appropriate assessment stages, as described below.

Stage 1: Screening

- 1.10** Issues to consider and include within an HRA screening assessment may include:
- proposed details of the methods used to determine which protected sites to include within the assessment;
 - a description of the protected site(s) and all associated interest features potentially affected;
 - a description of the development, processes, timings, and method of work;
 - an outline and interpretation of baseline data;
 - an appraisal of the project's likely significant effects (LSE) on the protected site(s); and
 - an appraisal, where known, of other plans or projects likely to have a significant effect in combination with the proposed development.

Stage 2: Appropriate Assessment

- 1.11** Where required, in addition to the issues set out under 'Stage 1: Screening', HRAs should include the following:
- evidence about the project's impacts on the integrity of protected sites;
 - a description of any mitigation measures proposed which avoid or reduce each impact, and any residual effect; and
 - the timing of mitigation measures in relation to the progress of the development.

2.0 Site & Planning Context

2.1 The study area comprises 18.9ha of mostly horse-grazed pasture fields dissected by hedgerows, fences and tracks with associated farm buildings. It was surrounded by housing and minor roads to the east, north, west and southwest, with two small arable fields and a large ancient broad-leaved woodland (Dodd's Wood) to the south. Whilst the Site is located close to the centre of the built-up conurbation Basildon-Southend, it is situated close to a series of semi-natural habitats.

2.2 Castle Point Borough Council Local Plan was adopted in 1998¹, with variations and retractions from 2011-2018. Castle Point Borough Council submitted the Castle Point Local Plan 2018 -2033 to the Secretary of State on 2 October 2020 for examination. This is in accordance with regulation 22 of the Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended).

2.3 Local plans and programmes include²:

- Essex Coast Recreational disturbance Avoidance and Mitigation Strategy (RAMS) (2018)
- Essex Green Infrastructure Strategy (ECC) (2020)
- Castle Point Local Plan HRA/AA (Update 2020)

3.0 Protected Sites

Zones of Influence

3.1 The Natural England Impact Risk Zones and Essex Coast RAMS (see Table 1) have been used to establish the potential impact pathways.

Table 1. Zones of Influence of Essex Coast European Designated Sites (Place Services, 2019)

European designated site	Underpinning SSSIs*	Zols (km)
Stour and Orwell Estuaries SPA and Ramsar	Orwell Estuary SSSI Stour Estuary SSSI Cattawade Marshes SSSI	13
Hamford Water SPA and Ramsar	Hamford Water SSSI	8
Colne Estuary SPA and Ramsar	Colne Estuary SSSI	9.7
Blackwater Estuary SPA and Ramsar	Blackwater Estuary SSSI	22
Dengie SPA and Ramsar	Dengie SSSI	20.8
Crouch and Roach Estuaries Ramsar and SPA	Crouch and Roach Estuaries SSSI	4.5
Foulness Estuary SPA and Ramsar	Foulness SSSI	13
Essex Estuaries SAC	Blackwater Estuary SSSI Colne Estuary SSSI Crouch and Roach Estuaries SSSI Dengie SSSI Foulness SSSI	~**
Benfleet and Southend Marshes SPA and	Benfleet and Southend Marshes SSSI	4.3

¹ <https://www.castlepoint.gov.uk/download.cfm?doc=docm93jjjm4n1259.pdf&ver=1490>

² <https://www.castlepoint.gov.uk/download.cfm?doc=docm93jjjm4n5204.pdf&ver=8631>

European designated site	Underpinning SSSIs*	Zols (km)
Ramsar		
Thames Estuary and Marshes SPA and Ramsar	Mucking Flats and Marshes SSSI	8.1
*Underpinning SSSIs are listed for Essex sites as these are what the Impact Risk Zones (IRZs) are aligned to. **The Essex Estuaries SAC comprises the Colne Estuary, Blackwater Estuary, Dengie, Crouch and Roach Estuaries and Foulness Estuary and so follow the respective Zols throughout.		

3.2 The site falls within the Zol (see Table 1 for Zol for Essex Coast RAMS) of Benfleet and Southend Marshes SPA and Ramsar which form part of the Essex Estuaries SAC. SSSI. Benfleet and Southend Marshes SPA/Ramsar are of **International** (SPA/Ramsar) importance.

3.3 Great Wood and Dodds Grove and Garrols Meadow SSSI are considered to fall within Zol of the proposed development be of **National Importance**.

3.4 Details of all nearby designated sites are provided below in Table 2.

Table 2. Designated Sites of international importance within 22km, Nationally Designated Sites within 5km and Statutory and Non-Statutory Locally Designated sites within 2km of the site.

Name and Site Designation	Distance and Direction from Site	Designated Features
Great Wood and Dodd's Grove SSSI	adjacent to site, south	Designated for its ancient broad-leaved woodland habitat and associated flora and for its population of heath fritillary butterfly <i>Mellicta athalia</i> .
Garrold's Meadow SSSI	0.3km northeast	An area of unimproved grassland with marshy influences.
Thundersley Great Common SSSI	1.6km northeast	Range of acidic grass/heath communities
Benfleet and Southend Marshes SPA and Ramsar <i>Underpinned by Benfleet and Southend Marshes SSSI</i>	2.6km Northeast	Made up of several intertidal, subtidal, and terrestrial habitats that support internationally significant populations of overwintering waterfowl. The site supports internationally important numbers of non-breeding dark-bellied brent goose <i>Branta bernicla bernicla</i> , grey plover <i>Pluvialis squatarola</i> , and knot <i>Calidris canutus</i> ; and nationally important populations of dunlin <i>Calidris alpina alpina</i> and ringed plover <i>Charadrius hiaticula</i> . The site supports internationally important assemblage of non-breeding waterfowl in excess of 27,000 birds.

4.0 Assessment of Likely Significant Effects

- 4.1** This section deals with the screening of likely significant negative effects on the qualifying features and sub-features of the relevant protected sites as a result of the construction and operation of the proposed development.

Construction Phase

- 4.2** At 2.6km from the site, Benfleet and Southend Marshes SPA and Ramsar is at such a distance that impacts such as air pollution, disturbance from construction or habitat loss will not occur.

Operational Phase - Direct effects

- 4.3** Given the distance of the site direct effects during the operational phase are not considered likely.

Operational Phase - Indirect Effects

- 4.4** The site lies within the Zone of Influence (Zol) of the Essex Coast Recreational disturbance Avoidance Mitigation Strategy (RAMS). This is confirmed by the Essex Coast RAMS Strategy (ECC & Place Services, March 2019). As such the proposed development is considered to lead to a likely significant effect from increased recreational pressure and hence mitigation is required in line with the HRA Record form provided for guidance by Natural England (August 2018) (in combination effects). Given the distance of the site from the coastal protected site, indirect effects both alone and in-combination during the operational phase are limited to recreational disturbance.

5.0 Appropriate Assessment

Mitigation Measures

- 5.1** The following mitigation measures, targeted at addressing likely significant effects on Benfleet and Southend Marshes sites are proposed to ensure no adverse effects on the integrity of this site.

Guidance

- 5.2** The guidance for the Essex Coast RAMS was published in March 2019 (ECC & Place Services, 2019 and Natural England Guidance (2018)) states that for developments within the Zol of European designated sites that are for more than 100 dwellings then the principal mitigation is:

- 5.3** For effect insulation mitigation provisions will include

- High quality, informal, semi natural areas
- Circular dog walking routes of 2.7km within the site and/ or with links to surrounding public rights of way
- Dog waste bins
- A commitment to long term management and maintenance of these provisions

- 5.4** To address mitigation of effects in combination: A proportionate financial contribution in line with the Essex Coast RAMS requirements.

Mitigation provision

On-site SANGs

- 5.5** The Natural England guidance on SANGs provision to mitigate for recreational pressures on European designated sites recommends 8ha per 1,000 persons. With 173 units proposed and an average 2.4 persons per household (based on UK 2011 Census Data), this equates to a 3.32ha requirement for the site.
- 5.6** While the development proposal is still at outline stage, the illustrative landscape masterplan (Appendix 1) includes a total of over 10ha of SANG quality openspace which include a range of different experiences including wetland areas, traditional orchard, wet grasslands, scrub grasslands and meadow grasslands which are all interlinked and accessible.
- 5.7** The onsite open space is well above the provision required for the Essex RAMS, this area can also accommodate a series of walking routes an example of which is shown within Appendix 1.
- 5.8** The areas of accessible semi-natural open space that will be provided by the proposed development are considered more than sufficient mitigation for any potential recreational impacts on European coastal designated sites. Access throughout the new open spaces will be ensured through the provision of a network of footpaths.
- 5.9** The public open space will be provisioned with dog waste bins to ensure the amenity of the area is maintained for all residents to enjoy.
- 5.10** New residents of the development will receive a welcome pack on arrival containing information leaflets detailing the open space facilities available on-site and locally off-site. This information will include suggested walking routes. Information boards will also be strategically located highlighting walking routes and wildlife / habitat sensitivities including the neighboring SSSIs.
- 5.11** To ensure the long-term maintenance and management of on-site open spaces, a Landscape and Ecological Management Plan (LEMP) will be produced. This will detail appropriate management actions for maintaining the on-site provisions to the required standard, works schedules, details of funding and the body or organisation responsible for implementation.

Links to Adjacent Public Rights of Way (PRoW) & Greenspace

- 5.12** The site provides ample onsite open space for informal recreation but also has links to the wider offsite PRoW network for residents looking for wider exploration and recreation. These include links north of the site Bramble Road onto Pond Wood, which is an Essex Nature Reserve which includes circular paths around the reserve³. Furthermore, to the south off Poors Lane with dedicated path and road through Belfairs Park Wood. The latter wood includes parking as well as multiple pathways through the

³ <https://www.essexwt.org.uk/nature-reserves/pound-wood>

woodland⁴. These walking routes in addition to the onsite routes provide well over 2.7km of varied SANGS quality circular walks.

Financial contribution to Essex RAMs

- 5.13** Mitigation in the form of a contribution to the Essex Coast RAMS proposed to ensure that there are no increased recreational pressures on the Essex Coast protected areas in combination with other plans and projects within the Zone of Influence of the Essex coast European designated sites. This mitigation measure is a standard measure agreed by Natural England and relevant competent authorities including Castle Point District Council.
- 5.14** The Essex Coast RAMS indicates a financial contribution of £137.71 per net new dwelling (2022/23). Subject to agreement on a reasonable per unit contribution, the RAMS financial contribution may be secured by an appropriate planning condition or commitment within a S106 agreement.

6.0 Assessment of effects

- 6.1** The proposed mitigation for the development is to provide locally available semi natural open space and a one-off financial contribution to assist the appropriate management of the nearby coastal designated sites.

In-isolation effects (effects alone)

- 6.2** The mitigation measures provided will result in no adverse effects on Integrity on the interest features upon any protected sites.
- 6.3** On this basis, **no adverse effects on the integrity in-isolation or alone** of nearby protected sites, resulting from the site proposals in-isolation, are anticipated.

In combination effects

- 6.4** The mitigation measures provided will result in no adverse effects on Integrity on the interest features upon any protected sites.
- 6.5** On this basis, **no adverse effects on the integrity in-isolation or alone** of nearby protected sites, resulting from the site proposals in-isolation, are anticipated.

Statutory Designated Sites

- 6.6** Great Wood & Dodd's Grove and Garrold's Meadow Site (recreational pressure only) SSSI are within the Zol. The following the environmental pathways that could lead to a significant adverse effects during the construction and operation stage are may be summarised as:
- direct loss or damage of habitats within a designated site or of nearby areas used by interest species, including functionally linked land;

⁴ <https://www.essexwt.org.uk/nature-reserves/belfairs>

- changes in air quality (including dust)
- changes in water quality;
- disturbance (activity, recreation, noise and lighting);
- Recreational pressure; and
- introduction or spread of non-native invasive species.

Construction Stage

- 6.7** Construction effects will be controlled by a CEMP, which will deal with physical protection of habitats such as retained trees and hedgerows. The CEMP will also deal with pollutants, water quality and indirect effects caused by lighting and noise.

Operation Stage

- 6.8** Mitigation measures to mitigate impacts upon the Benfleet and Southend Marshes SPA will also serve to mitigate impacts upon Great Wood and Dodd's Grove SSSI. In addition, there will be a minimum of a c.15m green buffer including thorny wood species to deter unfettered access into the woodland. A fence will also be provided along the woodland edge with the existing stream also serving to deter to access. Changes to air quality is outside the scope of this report but the closet internal roads/development parcels are c.190m from the woodland boundary edge. Important habitats onsite will be protected and enhanced (e.g. hedgerows) with complementary habitats to Great Wood and Dodd's Grove also being created ensuring potential impacts to functional linked habitats are mitigated. Indirect impacts from lighting will also be addressed through a wildlife sensitive lighting strategy. Planting will also not include non-native invasive species and this will be controlled via detailed landscaping proposals/ LEMP and a landscape clerk of works to ensure compliance.
- 6.9** Given the mitigation provided above it is considered that assessed impacts pathways can be mitigated and no damage to notification features of the SSSI are predicted.

7.0 Conclusions

- 7.1** Given the mitigation measures proposed - the provision of suitable open space, links to PRow network offsite and promotion of these features to new residents through information leaflets, display boards and signage, together with a financial contribution to the Essex Coast RAMS to mitigate increases in recreational pressure, there are no predicted impacts that contribute to any in combination effects considering other plans or proposals on the interest features of the SPA within the zone of influence.
- 7.2** With the implementation of the above mitigation measures, this HRA concludes that there will be **no adverse effects on the integrity in-isolation or in combination with other plans or projects** of nearby European designated sites
- 7.3** Through the above mitigation as well the production of a CEMP, LEMP, access control measures, wildlife friendly lighting, habitat retention and habitat creation strategy there are no predicted impacts upon notification features of Great Wood and Dodd's Grove and Garrold's Meadow SSSI.

8.0 References

SES(2022) Environmental Impact Assessment

Natural England (2018). *'Essex Recreational Disturbance Avoidance and Mitigation Strategy (RAMS) – Revised interim advice to ensure new residential development and associated recreational disturbance mitigation for designated site impacts is compliant with the Habitats Regulations 2010 (as amended).* Letter Reference: 214991, dated 16th August 2018.

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Appendix 1. Landscape Masterplan

