

Preliminary Ecological Appraisal

for

Former Battle of Britain Site, Coldharbour
Road, Gravesend

November 2022

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Non-technical summary

The Landscape Partnership was commissioned by Frontier Estates to undertake a Preliminary Ecological Appraisal comprising a desk study, Phase 1 Habitat Survey and an assessment of the potential of site features to support bats, together with an assessment of impacts at Former Battle of Britain Site, Coldharbour Road, Gravesend.

The objectives of the appraisal were to identify the habitats and species present or potentially present and evaluate their importance, assess the impact of the development proposal and describe any measures necessary to avoid impacts, reduce impacts or compensate for impacts so that there is no net harm to ecological features.

The survey involved classifying and recording habitat types and features of ecological interest and identified the potential for protected species to be present by assessing habitat suitability for those species. The survey was undertaken by appropriately qualified and experienced personnel.

The site comprised the site of the former Battle of Britain public house. The site is now vacant and the public house has been demolished. The site currently supports ephemeral vegetation in the location of the demolished pub, as well as hardstanding and a poor quality grass sward. The site is surrounded by fencing. Collectively the habitats within the proposed development site are assessed as being of value at the **Parish** level.

Based on the habitat types present, it is considered that the site has potential to support the following protected species or groups of species: breeding birds, terrestrial mammals and bats.

It is proposed to construct a 65-bed care home, with associated parking facilities and garden for use by the residents.

In the absence of mitigation, the proposed development could give rise to the following impacts: potential destruction of birds' nests and/or bat roosts and potential harm to foraging terrestrial mammals which would give rise to a **Minor Adverse** impact upon habitats, breeding birds, terrestrial mammals and bats. Avoidance and mitigation measures have been proposed, including retention of mature trees; soft felling the tree with low bat roost potential whilst the works are monitored by a licenced bat worker; removal of any vegetation outside the nesting bird season; and safeguards during the construction phase to minimise harm to terrestrial mammals. This mitigation would reduce the impacts of the development proposals upon the habitats and species present, to give rise to an overall **Neutral** impact.

No further surveys are considered necessary at this stage.

A number of **ecological enhancements** have been proposed, which would improve the quality of the site for native flora and fauna, including new native hedgerow planting, wildflower areas, habitat piles, hedgehog tunnels, bat boxes, swift boxes and native planting. Delivery of these enhancements would lead to an overall **Neutral-Minor Beneficial** impact.

Gravesham Borough Council Local Plan policy CS12: Green Infrastructure states, '*there will be no net loss of biodiversity in the Borough, and opportunities to enhance, restore, re-create and maintain habitats will be sought.*' The recommendations made within this report aim to enhance the site for biodiversity and are therefore in line with policy CS12.

1 Introduction

1.1 Commission

- 1.1.1 The Landscape Partnership was commissioned by Frontier Estates to carry out a Preliminary Ecological Appraisal (PEA), comprising a desk study, Phase 1 Habitat Survey and an assessment of the potential of site features to support bats, together with an assessment of impacts.

1.2 Legislation and policy background

- 1.2.1 There is a range of protection given to sites and species. Sites may be designated for local, national, or global importance for nature conservation. Species may be protected by varying levels of national regulation.
- 1.2.2 The Local Planning Authority has a policy to protect features of nature conservation value within its Local Plan. Other regulators have policies relating to the consents issued by them.
- 1.2.3 Further information is given in Appendix 1.
- 1.2.4 Assessment was undertaken against current legislation and planning policy, and in accordance with standard guidance. Further information is given in Section 2 and Appendix 2.

1.3 Site location and context

- 1.3.1 The site is located in south-west of Gravesend, in north-west Kent. The site lies on the corner of Coldharbour Road and New House Lane and the existing access is off Coldharbour Road to the west. The site, approximately 0.49 hectares, consists of the former Battle of Britain public house. The site is now vacant and from aerial photography and notes on the topographical survey the public house was thought to have been demolished during 2016. The site currently consists of ephemeral vegetation in the location of the demolished pub, as well as hardstanding and poor quality grass. The site is surrounded by fencing.
- 1.3.2 The site is surrounded predominantly by residential and suburban areas of Gravesend. The River Thames is located approximately 2.2km north of the site, with the A2 is located approximately 850m south of the site.
- 1.3.3 The Ordnance Survey Grid Reference for the approximate centre of the proposed development site is TQ 6366 7226. The location of the site is shown in Appendix 3. A plan showing the site is provided at Figure 01.

1.4 Acknowledgements

Permissions to gain access to land

- 1.4.1 Permission to gain access to the land for survey is gratefully acknowledged.

Surveyor Competencies

Survey(s) undertaken	Surveyor(s)	Experience (years)	Licences Held
Phase 1 habitat survey Preliminary bat roost inspection: Trees	Emily Costello MCIEEM	8+	Great crested newt Class Licence CL08 (Level 1) Bat Survey Class Licence CL18 (Level 2) FISC Level 3

Other contributors

- 1.4.2 We acknowledge the input of:
- Kent & Medway Biological Records Centre for provision of data.

1.5 Description of the project

- 1.5.1 It is proposed to construct a 65-bed care home, with associated parking facilities and garden for use by the residents. It is proposed to create a new access into the site off New House Lane. A new footpath is proposed to link the proposed care home site to an existing bus stop. The development proposals are shown in Appendix 4.
- 1.5.2 The site previously gained planning permission for the construction of 20 residential units, with associated parking spaces and communal gardens (Gravesend Borough Council planning reference 20171245). This planning permission has since lapsed.

1.6 Objectives of this appraisal

- 1.6.1 The purpose of this appraisal is to inform a planning application for the proposed development, as described above. Detailed objectives are to:
- identify the habitats and species present or potentially present and evaluate their importance;
 - identify any ecological constraints to development;
 - assess the impact of the development proposal;
 - identify any opportunities available for integrating ecological features within the development;
 - describe any measures necessary to avoid impacts, reduce impacts or compensate for impacts so that there is no net harm to ecological features;
 - propose ecological enhancements;
 - identify any additional surveys that may be required to inform an Ecological Impact Assessment (EcIA).

1.7 Previous ecological studies

- 1.7.1 There are no known previous ecological studies of the site.

1.8 Duration of appraisal validity

- 1.8.1 The assessment, conclusions and recommendations in this appraisal are based on the studies undertaken, as set out in this report, and the stated limitations. This appraisal is based on the project as described and any changes to the project would need the appraisal to be reviewed. Unless otherwise stated, the assessment, conclusions and recommendations given assume that the site habitats will continue to be used for their current purpose without significant changes until development takes place. However, changes in use or management may occur between the time of the survey and proposals being implemented. Ecological features may change naturally at any time; for example, species may be lost from existing sites or colonise new areas. Our knowledge of the ecology of the site enables us to provide an estimate of the duration of the validity of the surveys carried out and hence the applicability of this appraisal, so that any future need for review and update of this appraisal, or the surveys described within it, and the date by which such updates would become necessary, can be identified.
- 1.8.2 The table below sets out a guide to duration of validity of each element of each information source. If the proposed development is delayed beyond the stated timescale, updated surveys or further investigations may be required. Provided a planning application is made and validated prior to the end of the period stated below there would not normally be a requirement for further update survey except as indicated in Section 4.6.

Information source	Date undertaken	Guideline duration of validity from date undertaken	Notes
Desk study	8 th April 2022	2 years	Further data may become available.
Phase 1 habitat survey	5 th April 2022	2 years	The habitats on site may change especially if management changes.

Information source	Date undertaken	Guideline duration of validity from date undertaken	Notes
Preliminary bat roost inspection: Trees	5 th April 2022	2 years	Storm damage, tree felling or other factors can change bat roost potential of trees.

Gravesend Borough Council

2 Methodology

2.1 Desk study methodology

- 2.1.1 Kent & Medway Biological Records Centre was asked to provide records of protected, rare and/or priority species and details of statutory and non-statutory designated sites, within a 1km radius of the centre of the site at TQ 6366 7226. The data were received on 8th April 2022. The search area for bat records was within a 5km radius of the centre of the site.
- 2.1.2 The Magic website¹ was used to identify European sites within a 5km radius and national sites within a 1km radius. The Magic website was accessed on 4th April 2022.
- 2.1.3 Aerial photographs and OS maps were used to gain initial information about the site and the surrounding area. This gives an indication of the types of habitat and species likely to be present and the setting of the site within the landscape.
- 2.1.4 Water bodies within 250m of the site were identified from the relevant 1:25,000 Ordnance Survey map sheet, to establish the need for protected species scoping surveys, such as great crested newt Habitat Suitability Index surveys. Consideration was also given to the green infrastructure of the local area.
- 2.1.5 The potential for protected, rare and/or priority species to be present on site has been considered in this assessment, taking into account the nature of the site and the habitat requirements of the species in question. Absence of records does not constitute absence of a species. Habitats on the site may be suitable for supporting other protected species that have not previously been recorded within the search area. Conversely, presence of a protected species in the search area does not imply its presence on-site. Records of alien species, non-localised records (e.g. tetrad records) and records dated before 1995 have not been described in detail but are taken into account when considering likely species presence or absence.
- 2.1.6 The data supplied by the Records Centre were considered in the assessment of potential impacts below.

Limitations to desk study methodology

- 2.1.7 In accordance with BS42020 and advice from most Local Biological Record Centres, species lists are not appended to this report but are available to the Local Planning Authority on request.
- 2.1.8 Availability of records will vary in different locations, as many depend on the presence of local experts and survey effort within the local area. An absence of a record does not necessarily indicate the absence of that species.

2.2 Phase 1 habitat survey methodology

- 2.2.1 The standard Phase 1 (baseline) habitat survey methodology² was followed. Phase 1 habitat survey is a standardised system for surveying, classifying and mapping wildlife habitats, including urban areas. All habitats present and areas or features of ecological interest within such habitats were recorded and mapped. The survey methodology facilitates a rapid assessment of habitats and it is not necessary to identify every plant species on site. Where given, scientific names of plant species follow Stace ed. 4³.
- 2.2.2 The survey visit was also used to identify potential for protected, rare and/or priority species, for example bats, mammals, amphibians and reptiles, to occur on, or in the vicinity of, the proposed development site. Although the survey methodology is not intended for species survey, any protected, rare and/or priority species which were seen during the survey were noted.
- 2.2.3 The survey was undertaken on 5th April 2022 and the weather conditions were overcast (cloud cover 100%), with a moderate breeze (Beaufort 3) and a temperature of 12°C.

¹ MAGIC: <https://magic.defra.gov.uk/MagicMap.aspx>.

² JNCC (2010) *Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit*. Reprinted by JNCC, Peterborough.

³ Stace, C (2019) *New Flora of the British Isles*. C&M Floristics. 4th Edition.

Limitations to Phase 1 habitat survey

- 2.2.4 The Phase 1 habitat survey was undertaken just outside the main flowering season for many species, including woodland ground flora, as well as being outside the seasons in which some invasive species would be visible, for example those that are annual, or which die back in winter.

2.3 Preliminary bat roost assessment methodology: Trees

Rationale

- 2.3.1 Bats are European Protected Species. Many roosts are within trees, and the protection given to roosts means that their presence or absence in trees on the proposed development site needs to be understood.

Methodology

- 2.3.2 The standard Preliminary Ground Level Roost Assessment (PRA) methodology for trees⁴ was followed. This aims to determine the actual or potential presence of bats, by inspecting for potential roost features from the ground, and determines any need for further survey and/or mitigation.

- 2.3.3 Trees within the proposed development area were inspected for the presence of features which may be suitable for use by roosting bats, with particular attention given to older and mature trees. A thorough inspection was undertaken, looking for features and signs indicative of bat roosts:

- woodpecker holes;
- rot holes;
- hazard beams;
- other vertical or horizontal cracks and splits, such as frost cracks in stems or branches;
- partially detached bark plates;
- knot holes arising from naturally shed branches, or branches previously pruned back to the branch collar;
- artificial holes (such as cavities that have developed from flush cuts) or cavities created by branches tearing out from parent stems;
- cankers, caused by localised bark death, in which cavities have developed;
- other hollows or cavities including butt-rots at the base of the tree;
- potential cavities in the fork between double trunks ("compression forks"), where the wood has grown around sections of bark ("included bark");
- gaps between overlapping stems or branches;
- partially detached ivy with stem diameters in excess of 50mm;
- bat, bird or dormouse boxes.

- 2.3.4 Signs of a bat roost, in addition to the visible presence of bats, include:

- bat droppings in or around a potential roost feature (PRF);
- odour coming from a PRF;
- audible bat squeaks at dusk or during the day in warm weather;
- staining below the PRF.

- 2.3.5 Some signs, such as staining, odour or squeaking, may originate from other species, and staining may arise from wet rot which would preclude bat use. Bats or bat droppings are the only conclusive evidence of bat use, but many bat roosts have no external signs.

- 2.3.6 A high-power torch (Cluson Clulite) was used to inspect cavities and shaded areas of the branch structure.

- 2.3.7 The survey of trees included an assessment of their potential to support bat roosts using the following categories.

⁴ Collins, J. (ed.) (2016) *Bat surveys for professional ecologists: good practice guidelines*, Third Edition, Bat Conservation Trust.

Category	Description
Negligible	Trees with no potential to support bats
Low	A tree of sufficient size and age to contain potential roost features, but with none seen from the ground, or where the features seen have only very limited potential to support bats.
Moderate	A tree with one or more potential roost features, that could be used by bats due to their size, shelter, protection, condition and surrounding habitat, but are unlikely to support a roost of high conservation status.
High	A tree with one or more potential roost sites, that are obviously suitable for use by larger numbers of bats on a more regular basis, and potentially for longer periods of time, due to their size, shelter, protection, condition and surrounding habitat.
Confirmed roost	Trees with evidence of bats present.
Unknown	Unable to survey fully, for example because part of the tree is inaccessible.

2.3.8 The assessment was undertaken during the same site visit as the Phase 1 Habitat survey.

Limitations to preliminary bat roost assessment: trees

2.3.9 There were no significant limitations to the survey.

2.4 Assessment methodology

2.4.1 The assessment was undertaken in accordance with the Chartered Institute of Ecology and Environmental Management's Professional Guidance Series⁵.

2.4.2 More details of the assessment methodology are provided in Appendix 2, but, in summary, the impact assessment process involves:

- identifying and characterising impacts;
- incorporating measures to avoid and mitigate (reduce) these impacts;
- assessing the significance of any residual effects after mitigation;
- identifying appropriate compensation measures to offset significant residual effects; and
- identifying opportunities for ecological enhancement.

2.4.3 The hierarchical process of avoiding, mitigating and compensating for ecological impacts is explained further below.

2.4.4 In Ecological Impact Assessment (EcIA) it is only essential to assess and report significant *residual* effects (i.e. those that remain after mitigation measures have been taken into account). However, it is considered good practice for the EcIA to make clear both the potential significant effects without mitigation and the residual significant effects following mitigation, particularly where the mitigation proposed is experimental, unproven or controversial. Alternatively, it should demonstrate the importance of securing the measures proposed through planning conditions or obligations.

2.4.5 Assessment of the potential impacts of the proposed development takes into account both on-site impacts and those that may occur to adjacent and more distant ecological features. Impacts can be positive or negative. Negative impacts can include:

- direct loss of wildlife habitats;
- fragmentation and isolation of habitats through loss of connectivity;
- disturbance to species from noise, light or other visual stimuli;
- changes to key habitat features; and
- changes to the local hydrology, water quality, nutrient status and/or air quality.

2.4.6 Negative and positive impacts on ecological features are characterised based on predicted changes as a result of the proposed activities. In order to characterise the impacts on each feature, the following parameters are considered:

- the magnitude of the impact;
- the spatial extent over which the impact would occur;

⁵ CIEEM (2016) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal*, Second Edition. Chartered Institute of Ecology and Environmental Management, Winchester.

- the temporal duration of the impact and whether it relates to the construction or operational phase of the development;
- the timing and frequency of the impact; and
- whether the impact is reversible and over what time frame.

2.4.7 Both short-term (i.e. impacts occurring during the site clearance and construction phases) and long-term impacts are considered.

Conservation status

2.4.8 The extent to which the proposed development may have an effect upon ecological features should be determined in the light of its expected influence on the integrity of the site or ecosystem. The integrity of protected sites is considered specifically in the light of the site's conservation objectives. Beyond the boundaries of designated sites with specific nature conservation designations and clear conservation objectives, the concept of 'conservation status' is used. Conservation status should be evaluated for a study area at a defined level of ecological value. The extent of the area used in the assessment relates to the geographical level at which the feature is considered important.

2.4.9 For habitats, conservation status is determined by the sum of the influences acting on the habitats and their typical species that may affect their long-term distribution, structure and functions, as well as the long-term survival of its typical species within a given geographical area. For species, conservation status is determined by the sum of influences acting on the species concerned and inter-relationships that may affect the long-term distribution and abundance of its populations within a given geographical area.

Confidence in predictions

2.4.10 It is important to consider the likelihood that a change or activity will occur as predicted and also the degree of confidence in the assessment of the impact on ecological structure and function.

- **Certain** probability estimated at above 95%
- **Probable** probability estimated above 50% but below 95%
- **Possible** probability estimated above 5% but below 50%
- **Unlikely** probability estimated as less than 5%

Cumulative impacts

2.4.11 Consideration is also given to the potential for the development proposal to give rise to significant negative impact in combination with other proposed developments in the local area.

Overall assessment

2.4.12 An overall assessment of value and impact is provided. This is based upon the highest level or value of any of the features or species present, or likely to be present on the site. Similarly, the overall assessment of impact is the impact of greatest significance.

2.5 Mitigation hierarchy

2.5.1 The following principles underpin EcIA and have been followed, where applicable, in this assessment.

- **Avoidance** Seek options that avoid harm to ecological features (for example, by locating the proposed development on an alternative site or safeguarding on-site features within the site layout design).
- **Mitigation** Adverse effects should be avoided or minimised through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation.
- **Compensation** Where there are significant residual adverse ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures.
- **Enhancement** Seek to provide net benefits for biodiversity over and above requirements for avoidance, mitigation or compensation.

3 Results

3.1 Desk study results

European sites

- 3.1.1 The following European site (Special Protection Area, Special Area of Conservation, and Ramsar sites which are treated as if they were European sites) was identified within the search area and is detailed within the table below.

Site	Distance from development site (approx.)	Direction	Key habitat/features of interest
Thames Estuary & Marshes Ramsar	3.6km	NE	The site comprises a complex of brackish, floodplain grazing marsh ditches, saline lagoons and intertidal saltmarsh and mudflat along the River Thames between Gravesend and Sheerness in Essex and Kent. The habitats support internationally important numbers of wintering waterfowl, and the saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates.
Thames Estuary & Marshes SPA	4.9km	NE	

Sites of national importance

- 3.1.2 There were no sites of national importance in the search area.

Sites of local importance

- 3.1.3 There were no sites of local importance in the search area.
3.1.4 The site in relation to the search area can be found in Appendix 5.

Protected, rare and/or priority species

- 3.1.5 A number of species records were returned for the search area. Records for protected, rare and/or priority species from within the search area are summarised below. In accordance with BS42020 and advice from most Local Biological Record Centres, species lists are not appended but are available to the Local Planning Authority on request.

Veteran trees

- 3.1.6 No veteran tree records were returned.

Plants

- 3.1.7 Records for the following plant species were returned from the local area, bee orchid *Ophrys apifera*, pyramid orchid *Anacamptis pyramidalis*, bluebell *Hyacinthoides non-scripta*, chicory *Cichorium intybus*, common cudweed *Filago germanica*, field scabious *Knautia arvensis*, yellow vetchling *Lathyrus aphaca*, sainfoin *Onobrychis viciifolia*, strawberry clover *Trifolium fragiferum* and hoary plantain *Plantago media*.
- 3.1.8 Several historical plant records were returned from the local area, including shepherd's-needle *Scandix pecten-veneris*, cornflower *Centaurea cyanus* and divided sedge *Carex divisa*.
- 3.1.9 Several records for invasive and non-native species were returned. These species are listed on the Wildlife and Countryside Act 1981, as amended, Schedule 9 list for invasive and non-native species. Species included Nuttall's waterweed *Elodea nuttallii*, giant hogweed *Heracleum mantegazzianum*, Japanese knotweed *Reynoutria japonica*, Himalayan cotoneaster *Cotoneaster simonsii*, Japanese rose *Rosa rugosa*, parrot's-feather *Myriophyllum aquaticum* and false Virginia-creeper *Parthenocissus inserta*.

Invertebrates

- 3.1.10 Butterfly and moth species recorded included small heath *Coenonympha pamphilus*, wall *Lasiommata megera*, lackey *Malacosoma neustria*, white ermine *Spilosoma lubricipeda*, grey dagger *Acronicta psi*, dot moth *Melanchra persicariae* and mottled rustic *Caradrina morpheus*.
- 3.1.11 Records for Duffey's bell-head spider *Praestigia duffeyi*, shrill carder bee *Bombus sylvarum*, painted nomad bee *Nomada fucata* and squat furrow bee *Lasioglossum pauperatum* were also returned with the data search.
- 3.1.12 Stag beetle is relatively common in this part of the country⁶, and several records for this species were returned. The closest record was approximately 300m south of site.

Amphibians including great crested newts

- 3.1.13 Records of common toad *Bufo bufo* and common frog *Rana temporaria* were returned within the data search.
- 3.1.14 A search on MAGIC maps for great crested newts (GCN) *Triturus cristatus* survey licence returns and mitigation licenses⁷ revealed that none were found within a 1km radius of the site boundary. No records for great crested newts were returned with the data search.

Reptiles

- 3.1.15 There were several record of common lizard *Zootoca vivipara*, as well as a few records for slow worms *Anguis fragilis* and grass snake *Natrix helvetica*. The common lizards were found approximately 600m south of the site.

Birds

- 3.1.16 One record of a sparrowhawk was returned within the data search. The most recent record for this species was 1998.
- 3.1.17 The only other bird records returned were historical bird records, the majority of these records were most recently found 1989. Historical bird species returned from the local area included stock dove *Columba oenas*, turtle dove *Streptopelia turtur*, swift *Apus apus*, skylark *Alauda arvensis*, house martin *Delichon urbica*, dunnoek *Prunella modularis*, song thrush *Turdus philomelos*, mistle thrush *Turdus viscivorus*, willow warbler *Phylloscopus trochilus*, starling *Sturnus vulgaris*, house sparrow *Passer domesticus* and greenfinch *Carduelis chloris*.

Dormouse

- 3.1.18 No dormouse *Muscardinus avellanarius* records were returned.
- 3.1.19 A search on MAGIC maps for dormice mitigation licenses⁷ revealed that none were found within a 1km radius of the site boundary.

Terrestrial Mammals including badgers

- 3.1.20 Badger *Meles meles*, hedgehog *Erinaceus europaeus*, stoat *Mustela erminea* and rabbit *Oryctolagus cuniculus* have been recorded from the local area.
- 3.1.21 An historical record for brown hare *Lepus europaeus* was also returned.

Aquatic Mammals including water voles and otters

- 3.1.22 No protected, rare and/or priority aquatic mammal species records were returned.

Bats

- 3.1.23 Records of brown long-eared *Plecotus auritus*, common pipistrelle *Pipistrellus pipistrellus*, Daubenton's *Myotis daubentonii*, Leisler's *Nyctalus leisleri*, Nathusius' pipistrelle *Pipistrellus nathusii*, Natterer's *Myotis nattereri*, noctule *Nyctalus noctula*, serotine *Eptesicus serotinus*, soprano pipistrelle *Pipistrellus pygmaeus* and whiskered *Myotis mystacinus* were returned within a 5km search area.

⁶ https://ptes.org/wp-content/uploads/2018/06/SoBSB_2018.pdf

⁷ MAGIC: <https://magic.defra.gov.uk/MagicMap.aspx>. [Date Accessed 6th April 2022]

- 3.1.24 A search on MAGIC maps for bat mitigation licenses⁷ revealed that none were found within the 1km search area.

3.2 Phase 1 habitat survey results

- 3.2.1 Nine Phase 1 habitat categories were identified during the Phase 1 habitat survey and are shown on Figure 01. Each habitat is described below.

Management, setting and green infrastructure

- 3.2.2 The site consisted of the former Battle of Britain public house. The public house was thought to have been demolished in 2016 and since then the site as a whole has been vacant. The grassland, privet hedgerow and ivy on the fences within the site does not appear to have been managed on a regular basis. The site was surrounded by fencing to prevent unauthorised access; stop blocks and a padlocked gate were present at the existing access point off Coldharbour Road.

- 3.2.3 According to aerial photographs the grassland within the site appeared to have been managed on a regular basis prior to the demolition of the pub. These areas were previously used for outside seating for the public house.

- 3.2.4 The site is surrounded predominantly by residential and suburban areas of Gravesend. The River Thames is located approximately 2.2km north of the site, with the A2 is located approximately 850m south of the site.

A2.1 Dense scrub

- 3.2.5 A small patch of dense bramble *Rubus fruticosus* agg. scrub was located at the northern corner of the site outside the hoarding. This bramble has appeared on aerial photographs in the years following the demolition of the pub and has therefore established recently.

A3.1 Scattered broadleaved trees

- 3.2.6 A number of scattered trees were present at the boundaries of the site, including beech *Fagus sylvatica*, pear *Pyrus* sp., silver birch *Betula pendula*, elder *Sambucus nigra* and goat willow *Salix caprea*.

B6 Semi-improved grassland

- 3.2.7 The grassland denoted by this habitat was previously managed as amenity grassland as part of the former public house, as seen on aerial photographs. Since the demolition of the former public house, this grassland does not appear to have been as regularly managed given the sward height and ruderal species present within the grassland. The sward height of this grassland at the time of the survey was approximately 10cm.

- 3.2.8 The grassland outside the hoarding also consisted of this habitat type. At the time of the survey the sward height in this area was approximately 10cm. The management of this grassland is unknown; however, given the grassland condition, it is likely mowed fairly regularly.

- 3.2.9 Species included meadow grass *Poa* sp., Yorkshire fog *Holcus lanatus*, mallow *Malva* sp., nettle *Urtica dioica*, ground-ivy *Glechoma hederacea*, bittercress *Cardamine* sp., cow parsley *Anthriscus sylvestris*, cleavers *Galium aparine*, dandelion *Taraxacum officinale* agg., white deadnettle *Lamium album* and bristly oxtongue *Helminthotheca echioides*. Bramble was establishing throughout this habitat and was mainly found towards the boundaries.

J1.2 Amenity grassland

- 3.2.10 This grassland was just outside the site boundary and appeared to be mown on a regular basis. The sward height was approximately 5-8cm. Species included meadow grass, perennial rye-grass *Lolium perenne*, white clover *Trifolium repens*, ribwort plantain *Plantago lanceolata*, spotted medick *Medicago arabica* and groundsel *Senecio vulgaris*.

J1.3 Ephemeral / short perennial

- 3.2.11 The habitat of this type within the site consisted of rubble with vegetation emerging and establishing. This was the location of the former Battle of Britain Public House that had been demolished in 2016. Species were sporadic throughout this habitat and included species as listed within B6 semi-improved grassland habitat type above, with the addition of buddleia *Buddleja*

davidii, creeping thistle *Cirsium arvense*, hogweed *Heracleum sphondylium*, common ragwort *Jacobaea vulgaris* and broad-leaved dock *Rumex obtusifolius*.

J1.4 Introduced shrubs

- 3.2.12 Remnants of ornamental planting associated with the former public house were evident towards the southern boundary. Three conifer trees were present in this location.

J2.1.2 Species-poor intact hedge

- 3.2.13 A small section of privet *Ligustrum* sp. hedgerow was located towards the southern boundary. This hedgerow, approximately 2.5m in height, protruded into the site from the southern boundary.

J2.4 Fence

- 3.2.14 The site was surrounded by hoarding, close-board fencing and metal palisade security fencing. Ivy *Hedera helix* was growing over the metal palisade fencing at the eastern and southern boundaries.

J4 Hardstanding

- 3.2.15 The majority of the site was covered in asphalt that formed the access roads and car parking areas of the former public house. This asphalt was in a poor state of repair in some locations and ruderal and ephemeral vegetation was establishing in the cracks and holes.

3.3 Preliminary bat roost assessment results: Trees

- 3.3.1 One of the trees within the site boundary was assessed as providing low bat roost potential. The remaining trees within the site boundary did not provide roosting opportunities for bats. The results of the survey are shown in the table below and the location of the trees is shown in Figure 01.

Tree		Potential Roost Feature (PRF)			Bat Roost Potential	Comments
No.	Species	Type	Height above ground	Facing direction		
T10	Goat willow	Dense ivy	0m+	ALL	Low	Dense ivy covering concealing potential roost features

4 Evaluation of conservation status and impact assessment

4.1 Assessment rationale

- 4.1.1 The assessment is based on the ecological data presented within this report. Future changes in the wildlife present on site are beyond the scope of this report, unless specifically stated.

4.2 Evaluation of conservation status and assessment of designated sites

- 4.2.1 The ecological value of the site is considered below and evaluated using the methodology set out in Appendix 2 and in accordance with species legislation and planning policy, as outlined in Appendix 1.

European Sites

- 4.2.2 There is one European site of very high importance within the search area. This site is assessed as being of **Very High** importance for wildlife.

- 4.2.3 The Gravesham Borough Council Website⁸ indicates that a cost should be paid IF recreational impacts upon Thames Estuary and Marshes Ramsar and SPA are anticipated. It states that for C2 class developments (residential institutions) within 6km of the Ramsar /SPA a cost of '£275.88 per unit and otherwise on a case-by-case basis' is required. However it is considered very unlikely that residents of the proposed care home would visit Thames Estuary and Marshes and so are unlikely to cause recreational impacts upon this site. This development is very different to other C2 residential institutions such as boarding schools, residential colleges and training centres, where residents are more mobile and have the ability to travel and use Thames Estuary and Marshes for recreational purposes. Furthermore, pets such as cats and dogs are not kept in care homes and therefore impact from domestic animals is unlikely to be an issue.

- 4.2.4 It is anticipated that no negative impacts to the Ramsar and SPA site are likely to result from the proposed development due to the distance from the development, the purpose and type of residents that would use this the development and its context in an already-developed area. The impact of the proposed development upon European sites is therefore assessed as **Neutral**. It is therefore considered unnecessary to make a financial contribution, as recreational impacts are not anticipated.

Sites of national importance

- 4.2.5 There are no sites of national importance in the search area other than the European site assessed above. The impact of the proposed development upon other nationally designated sites is therefore assessed as **Neutral**.

- 4.2.6 Sites of Special Scientific Interest (SSSI) Impact Risk Zones are used to assess the need for the LPA to consult Natural England on planning applications at varying distances from SSSIs. In accordance with the SSSI Impact Risk Zones User Guidance⁹ consultation with Natural England would be required for the proposed development site for:

- **Infrastructure:** Airports, helipads and other aviation proposals.
- **Wind & Solar Energy:** Wind turbines.
- **Minerals, Oil & Gas:** Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.
- **Residential:** Residential development of 500 units or more.
- **Rural Residential:** Any residential development of 500 or more houses outside existing settlements/urban areas.
- **Air Pollution:** Livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t.
- **Combustion:** General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant,

⁸ <https://www.gravesham.gov.uk/home/planning-and-building/nature-conservation-and-landscape/thames-estuary-and-marshes> [Date accessed 6th April 2022]

⁹ Magic Maps www.magic.defra.gov.uk/MagicMap.aspx

pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/combustion.

- **Waste:** Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill.
- **Discharges:** Any discharge of water or liquid waste of more than 5m³/day to ground (i.e. to seep away) or to surface water, such as a beck or stream.
- **Notes 1:** For new residential development in this area financial contributions are required to mitigate increased recreational disturbance on coastal SPAs and Ramsar Sites. Check with Local Planning Authority.

4.2.7 The proposed development does not fall within these categories and therefore does not require the LPA to consult Natural England.

4.2.8 Note 1 indicates that new residential development should provide financial contributions to mitigate potential increased recreational disturbance on coastal SPAs and Ramsar. As discussed above, there are no anticipated recreational impacts as a result of the proposed care home and therefore financial contributions to Thames Estuary and Marshes SPA and Ramsar is not considered necessary.

4.2.9 The impact of the proposed development upon sites of national importance is considered to be **Neutral**, due to the distance of the proposed development from the designated sites, the reasons for the sites' designation and the purpose and type of residents that would use this the development.

Sites of local importance

4.2.10 There were no sites of local importance returned from within the search area.

4.2.11 The impact of the proposed development upon sites of local importance is considered to be **Neutral**, due to the distance of the proposed development from the locally important sites, the reasons for the sites' designation and the character of the development within its local context.

4.3 Evaluation of conservation status and assessment of habitats and green infrastructure

Habitats

4.3.1 Habitats of higher ecological value include the trees and it is recommended that the trees are retained and incorporated into the development as part of the site's green infrastructure.

4.3.2 The other habitats within the site are considered to be negligible to low because of either the recent establishment of these habitats, limited extent within the site and species composition.

4.3.3 The value of the habitats within the site are considered to be **Lower** at the **Site Only** scale. The impact of the development was therefore **Neutral**.

Green infrastructure

4.3.4 The site provides little in the way of green infrastructure given the lack of vegetated boundary features. The existing trees offer some value for green infrastructure.

4.4 Evaluation of conservation status and assessment of species

Veteran trees

4.4.1 There are no veteran trees present on the site and the value of the proposed development site for these is therefore **Negligible**. The impact of the proposed development upon veteran trees is **Neutral**.

Plants

4.4.2 The character of the habitats recorded at the site and the plant records returned for the local area, suggests that the site has no potential to support protected, rare and/or priority plants. The value of the proposed development site for this group is **Negligible** and the impact of the proposed development is **Neutral**.

Invertebrates

- 4.4.3 The character of the habitats recorded at the site and the invertebrate records returned for the local area, suggests that the site has no potential to support protected, rare and/or priority invertebrates. The value of the proposed development site for this group is **Negligible** and the impact of the proposed development is **Neutral**.

Amphibians including great crested newts

- 4.4.4 The habitats within the site provided limited opportunities for the terrestrial phase of great crested newts. The grassland and scrub are considered sub-optimal for this group but are of limited extent within the site. Furthermore, the site is not connected to suitable terrestrial habitats within the local area.
- 4.4.5 The absence of ponds on site, and within 250m of the site, suggests that there is no reasonable likelihood of great crested newts being present. The value of the proposed development site for this group is **Negligible** and the impact of the proposed development is **Neutral**.

Reptiles

- 4.4.6 The habitats within the site provided limited opportunities for reptiles. The grassland and scrub are considered sub-optimal for this group but are of limited extent within the site. Furthermore, the site is not connected to suitable habitats within the local area nor is the site connected to the habitats where several common lizard records were located.
- 4.4.7 The character of the habitats recorded at the site and the reptile records returned for the local area, suggests that the site has very limited potential to support protected, rare and/or priority reptiles. The value of the proposed development site for this group is **Negligible** and the impact of the proposed development is **Neutral**.

Birds

Breeding birds

- 4.4.8 The site is likely to be used by common breeding bird species, both for nesting and foraging, with the trees and scrub habitats being of greatest value in this respect. It is considered that the value of the site to breeding birds is **Lower** at the **Site Only** scale given the limited extent of these habitats within the site.
- 4.4.9 The impact of the development is therefore considered to be **Neutral**. Under current design plans, the trees are proposed for retention. The scrub will be removed to facilitate the development. This scrub should be removed outside the nesting bird season to prevent an offence being committed.

Wintering birds

- 4.4.10 There are no habitats present on site which might support significant populations of wintering birds, although the site does offer some limited foraging potential for small numbers of common species. The site is considered to be of **Negligible** value for this group.

Dormice

- 4.4.11 There were no dormouse records returned for the site, and the habitats present offer an inadequate resource for this species. The site is not suitably connected via hedgerow or other vegetation, to ancient woodland or any suitable dormice habitat within the local area.
- 4.4.12 The site is therefore considered to be of **Negligible** value for this species and the impact of the proposed development is **Neutral**.

Aquatic mammals including water voles and otters

- 4.4.13 There were no watercourses or waterbodies within the site or within close proximity to the site that were considered suitable for water voles and otters. The site also did not provide suitable terrestrial habitats for these species.
- 4.4.14 The character of the habitats recorded at the site and the mammal records returned for the local area, suggests that the site has no potential to support protected, rare and/or priority aquatic

mammals. The value of the proposed development site for this group is **Negligible** and the impact of the proposed development is **Neutral**.

Terrestrial mammals including badgers

- 4.4.15 The site provided limited cover for sett creation, with the bramble and the ivy at the northern boundary being of greatest value. No evidence of badgers or their setts were found within the site at the time of the survey. Several holes (Target Note 1) were located across the site; however, these were thought to be inhabited by either foxes or rabbits because of the shape and size of the entrance holes.
- 4.4.16 The site provided suitable foraging habitats for terrestrial mammals such as hedgehogs, foxes and rabbits.
- 4.4.17 The site is considered to be of **Negligible** value for badgers and the impact of the proposed development is **Neutral**. Mitigation measures to safeguard terrestrial mammals during the construction phase have been suggested in Section 5.

Bats

Roosting potential

- 4.4.18 One tree (T10 - goat willow) within the site was assessed as proving low bat roost potential. The site is therefore considered to be of **Lower** importance for roosting bats at the **Parish** level.
- 4.4.19 This tree is proposed for coppicing under current design proposals. This tree should be coppiced using soft felling techniques and whilst a licenced bat worker is monitoring the works. The impact of the development is therefore reduced to be **Neutral**.

Foraging/commuting potential

- 4.4.20 Based on the evidence gained during the Phase 1 survey, the site is likely to be predominantly used for commuting and foraging purposes by relatively common and widespread bat species. Suitable foraging habitats were limited given the lack of vegetation present within the site. The site was not suitably connected to areas of suitable foraging within the local area. The value of the site is therefore considered to be **Lower** at the **Site Only** scale. The impact of the of proposed development upon foraging/commuting bats is therefore considered to be **Neutral**.

4.5 Cumulative impacts

- 4.5.1 There are no known cumulative impacts.

4.6 Proposals for further survey or investigation

Surveys

- 4.6.1 No further survey or investigation is required.

Biodiversity Net Gain calculations

- 4.6.2 Some Local Planning Authorities require calculations of Biodiversity Net Gain using the national standard Defra metric, although a small proportion of those councils prefer a different metric. The areas of habitats are given various values, and a calculation of those values and habitat area provides the number of biodiversity units a development site has, before development and for the proposals. An appeal decision in October 2020¹⁰ made it clear that where a Local Plan requires Net Gain measured using a metric, but does not quantify the amount of Net Gain, there is no need to meet the 10% Net Gain requirements of the Environment Bill as it is not yet law.
- 4.6.3 Gravesham Borough Council Local Plan¹¹ policy CS12: Green Infrastructure states, '*there will be no net loss of biodiversity in the Borough, and opportunities to enhance, restore, re-create and maintain habitats will be sought.*' The recommendations made within this report aim to enhance the site for biodiversity and are therefore in line with policy CS12.

¹⁰ Planning Inspectorate (14th October 2020) Appeal Ref: APP/Y0435/W/20/3251121
Land at Brickhill Street, South Caldecotte, Milton Keynes MK17 9FE

¹¹ Gravesham Borough Council (Adopted September 2104) Gravesham Local Plan Core Strategy.

5 Mitigation and avoidance measures

5.1 Avoidance measures

5.1.1 The following impact avoidance measures have been identified and will be delivered.

Habitats

- All mature trees to be retained in-situ.

Breeding birds

- Vegetation removal required for the construction phase should take place outside the bird breeding season of March to August inclusive, to prevent disturbance to birds, or if removed in that period, only after a survey has shown that no active nests are present.

5.2 Proposed mitigation for known impacts

5.2.1 No mitigation is needed for the following ecological features, because no significant impacts have been identified: European sites and nationally important designated sites; locally important sites; rare plants; invertebrates; amphibians including great crested newts; reptiles; breeding and wintering birds; dormice; badgers and aquatic mammals such as water vole and otter.

5.2.2 The following mitigation is required to reduce the impacts of the scheme to within acceptable limits.

Habitats

- Ensure that no works come closer than Root Protection Zones of trees and shrubs (as a minimum) in retained habitats.

Terrestrial mammals

- Trenches should be filled in prior to the end of the working day, or a ramp left from the base of the trench to the surface, so that animals falling in can get out of the excavation.
- Pipework should be closed off at the end of each working day to avoid badgers and other animals becoming trapped.

Bats

- The tree with low bat roost potential, will be coppiced using soft-felling techniques and whilst a licenced bat worker is monitoring the works.

5.3 Compensation for ecological impacts

5.3.1 No compensatory habitat creation or management is proposed.

5.4 Species licensing

5.4.1 No species licensing is considered necessary at this stage.

5.4.2 It is not considered necessary to enter the Natural England District Level Licensing scheme for great crested newts given the lack of ponds within 250m of the site boundary and very limited terrestrial habitat within the site itself.

6 Enhancement measures

6.1 Ecological enhancement

6.1.1 Ecological enhancement aims to improve the quality of the site and the immediate vicinity for native flora and fauna. Such enhancements can also provide aesthetic appeal and can add value to the proposed development.

6.1.2 Enhancement opportunities specific to the development proposals for this site are provided below. It is not anticipated that all of these options would be utilised. The options are listed in order of priority, with habitat enhancements having most benefit to wildlife. Small-scale enhancements targeted at individual species, whilst valuable, are generally of less overall benefit than habitat enhancement measures.

6.2 Habitat enhancement

6.2.1 Wherever possible, planting would use native species, which support biodiversity significantly better than non-native plants. This is due to the numbers of flowers, fruits, seeds and berries that are produced by our native species and their different flowering and fruiting times throughout the year.

6.2.2 Habitat enhancements include the following.

- A contribution to the 'B-Lines' project¹² should be made by seeding with a native wildflower seed mix and use of native flowering trees and shrubs in planting scheme.
- A native hedgerow with a mixture of species should be planted at the south-eastern site boundary. Species should include berry-bearing species to provide for bird foraging, and native species to attract insects. A structurally diverse range of plants should be used, including shrubs large enough to support nesting birds. Following establishment of proposed native hedgerows, good practice in hedgerow maintenance should be employed, including cutting alternate sides of hedges on alternate years, which will benefit hedgerow species such as breeding birds, small mammals and bats.

6.2.3 These enhancements would benefit common invertebrates, breeding birds, badger foraging and bat foraging.

6.3 Small-scale species enhancement measures

6.3.1 Small-scale enhancements to benefit individual species/species groups would include the following.

- Three bat boxes (e.g. Vivara, Ibstock, Habibat or similar), suitable for a range of bat species, should be installed into the proposed building in unlit parts of the site.
- Three swift boxes should be installed into the proposed building.
- One habitat pile should be created, using woody cut material (brush) from vegetation clearance. This should be stacked in a quiet, sheltered corner of the site to form a pile measuring approximately 2m x 1m x 1m.
- If close-board fencing is proposed, creation of hedgehog highways through fences; a gap of 13cm x 13cm should be cut out of the base of close board fences to allow hedgehogs to move through the site after construction is complete. Alternatively, include in fence design at least two Hedgehog Friendly Gravel Boards¹³ or similar per garden.

¹² <https://www.buglife.org.uk/b-lines-hub>

¹³ <https://www.kebur.co.uk/product/hedgehog-concrete-gravel-board/> or https://www.jacksons-fencing.co.uk/product/sc_667610/hedgehog-gravel-board-for-use-with-slotted-posts-1.83m-x-140-x-28mm-incl-1-x-end-packer-1-x-length-packer-jakcured

7 Recommendations

7.1 Recommended conditions

- 7.1.1 It is recommended that the following conditions, based on model conditions in Appendix D of BS42020:2013, are applied to the planning permission.
- 7.1.2 No removal of hedgerows, scrub or trees shall take place between 1st March and 31st August inclusive, unless a competent ecologist has undertaken a careful, detailed check of vegetation for active birds' nests immediately before the vegetation is cleared and provided written confirmation that no birds will be harmed and/or that there are appropriate measures in place to protect nesting bird interest on site. Any such written confirmation should be submitted to the local planning authority.

Gravesend Borough Council

8 Conclusions

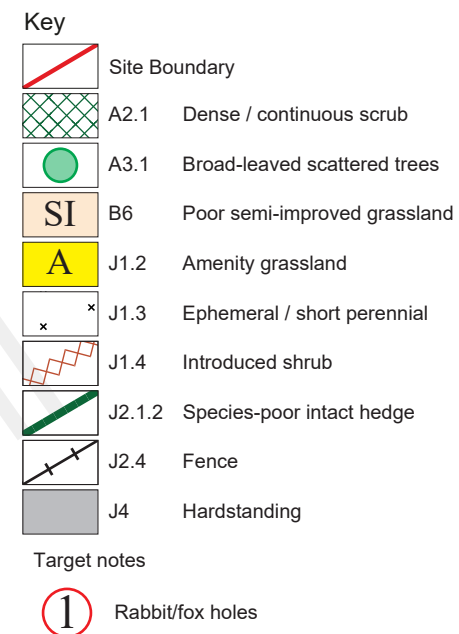
- 8.1.1 The purpose of this report was to inform a planning application for the proposed development.
- 8.1.2 The overall value of the site to wildlife is considered to be **Lower** at the **Parish** scale.
- 8.1.3 A summary of assessments of value and the impact of the proposed development without mitigation, and the residual significant effects following mitigation, is provided in the table below.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
European Sites	Very High	European	Neutral	Certain	-
Sites of national importance	High	National	Neutral	Certain	-
Sites of local importance	Medium	County	Minor Adverse	Certain	-
Habitats	Lower	Site only	Neutral	Probable	-
Veteran trees	Negligible	-	-	-	-
Plants	Negligible	-	-	-	-
Invertebrates	Negligible	-	-	-	-
Amphibians including great crested newts	Negligible	-	-	-	-
Reptiles	Negligible	-	-	-	-
Breeding birds	Lower	Site only	Neutral	Probable	-
Wintering birds	Negligible	-	-	-	-
Dormice	Negligible	-	-	-	-
Aquatic mammals including water voles and otters	Negligible	-	-	-	-
Terrestrial mammals including badgers	Negligible	-	-	-	-
Bats: Roosting in trees	Lower	Parish	Neutral	Probable	-
Bats: Roosting in buildings	Negligible	-	-	-	-
Bats: Foraging/commuting	Lower	Site only	Neutral	Probable	-

- 8.1.4 No further surveys are considered necessary at this stage.
- 8.1.5 The overall impact of the proposals is considered to be **Neutral**.
- 8.1.6 The adoption of all or most of the enhancement measures detailed in Section 6 above would give rise to a **Neutral-Minor Beneficial** impact.

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Figures



B22032 - Coldharbour Road, Gravesend

Phase 1 Habitat Survey

Figure 01

Scale: NTS

April 2022



Gravesham Borough Council

Appendix 1

Legislative and policy context

There is a number of pieces of legislation, regulations and policies specific to ecology which underpin this assessment. These may be applicable at a National or Local level. References to legislation are given as a summary for information and should not be construed as legal advice.

Birds Directive

The European Community Council Directive on the Conservation of Wild Birds (79/409/EEC), normally known as the Birds Directive, sets out general rules for the conservation of all naturally occurring wild birds, their nests, eggs and habitats. It was superseded by the 'new' Birds Directive (2009/147/EC) which generally updated the previous directive.

Since the end of the Brexit transition period on 31st December 2020 the Birds Directive no longer is part of the UK legal system.

Habitats Directive

The European Community Council Directive on the Conservation of Natural Habitats of Wild Fauna and Flora (92/43/EEC), normally known as the Habitats Directive, aims to protect the European Union's biodiversity. It requires member states to provide strict protection for specified flora and fauna (i.e. European Protected Species) and the registration and regulation of Special Areas of Conservation.

Since the end of the Brexit transition period on 31st December 2020 the Habitats Directive no longer is part of the UK legal system.

Conservation of Habitats and Species Regulations 2017

The Conservation of Habitats and Species Regulations 2017 generally follow the Birds Directive and Habitats Directive but unlike the Directives there is no role for the European Union; the UK Government has taken that role following the end of the Brexit transition period on 31st December 2020. For clarity, the following paragraphs consider the case in England only, with Natural England given as the appropriate nature conservation body. In Wales, the Countryside Council for Wales is the appropriate nature conservation body.

Special Protection Areas and Special Areas of Conservation are defined in the regulations as forming a national network of 'European sites'. The Regulations regulate the management of land within European sites, requiring land managers to have the consent of Natural England before carrying out management. Byelaws may also be made to prevent damaging activities and if necessary land can be compulsorily purchased to achieve satisfactory management.

The Regulations define competent authorities as public bodies or statutory undertakers. Competent authorities are required to make an appropriate assessment of any plan or project they intend to permit or carry out, if the plan or project is likely to have a significant effect upon a European site. The permission may only be given if the plan or project is ascertained to have no adverse effect upon the integrity of the European site. If the competent authority wishes to permit a plan or project despite a negative assessment, imperative reasons of over-riding public interest must be demonstrated, and there should be no alternative to the scheme. The permissions process in that case would involve the Secretary of State. In practice, there will be very few cases where a plan or project is permitted despite a negative assessment. This means that a planning application has to be assessed by the Local Planning Authority, based on information provided by the applicant, and the assessment must either decide that it is likely to have no significant effect on a European site or ascertain that there is no adverse effect upon the integrity of the European site.

Government policy is for Ramsar sites (wetlands of global importance) to be treated as if they were European sites within the planning process.

Appropriate Assessment

Appropriate Assessment is required in certain instances under the Conservation of Habitats and Species Regulations 2017. Regulation 63 says that:

63.— (1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which-

(a) is likely to have a significant effect on a European site or a European offshore marine site

(either alone or in combination with other plans or projects), and

(b) is not directly connected with or necessary to the management of that site,

must make an appropriate assessment of the implications for that site in view of that site's conservation objectives.

(2) A person applying for any such consent, permission or other authorisation must provide such information as the competent authority may reasonably require for the purposes of the assessment or to enable it to determine whether an appropriate assessment is required.

(3) The competent authority must for the purposes of the assessment consult the appropriate nature conservation body and have regard to any representations made by that body within such reasonable time as the authority specifies.

(4) It must also, if it considers it appropriate, take the opinion of the general public, and if it does so, it must take such steps for that purpose as it considers appropriate.

(5) In the light of the conclusions of the assessment, and subject to regulation 64, the competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).

(6) In considering whether a plan or project will adversely affect the integrity of the site, the authority must have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions subject to which they propose that the consent, permission or other authorisation should be given.

Regulation 70 provides that Regulations 63 and 64 apply in relation to the grant of planning permission. Regulation 70(3) specifically addresses outline applications, saying that:

"Where [Regulations 63 and 64] apply, outline planning permission must not be granted unless the competent authority is satisfied (whether by reason of the conditions and limitations to which the outline planning permission is to be made subject, or otherwise) that no development likely adversely to affect the integrity of a European site or a European offshore marine site could be carried out under the permission, whether before or after obtaining approval of any reserved matters."

The tests under the Habitats Regulations are very strict. To exclude a likely significant effect under Regulation 63(1)(a) or to exclude an adverse effect on integrity under Regulation 63(5) a competent authority must be certain beyond a reasonable scientific doubt as to the absence of such effects.

Although not provided for under the Habitats Regulations, Government policy under paragraph 176(b) of the NPPF is for Ramsar sites (wetlands of global importance) to be treated as if they were European sites within the planning process.

The competent authority is typically the local planning authority, or an Inspector / Secretary of State for appeals. The appropriate assessment contains the information the council requires for the purposes of its assessment under the Habitat Regulations.

The Habitats Regulations also are applicable to local authority land use plans and policies. If a policy or plan is likely to have a significant effect upon a European site, the permission may only be given if the policy or plan is ascertained to have no adverse effect upon the integrity of the European site. This approach gives rise to a hierarchy of plans each with related appropriate assessments. For example, the appropriate assessment of a Regional Spatial Strategy will affect policies within a Core Strategy, which will then need its own appropriate assessment, and so on.

European Protected Species

European Protected Species of animals are given protection from deliberate capture, injury, killing, disturbance or egg taking/capture. Their breeding sites or resting places are also protected from damage or destruction, which does not have to be deliberate. A number of species are listed as European Protected Species, with those most likely to be considered in planning applications being bats, dormouse, great crested newt and otter. Natural England may give a licence for actions that are otherwise illegal, subject to them being satisfied

on the three tests of no alternative, over-riding public interest, and maintenance of the species in favourable condition.

European Protected Species of plant are also listed and given protection. These species are generally very rare and unlikely to be present in proposed development sites.

Wildlife and Countryside Act 1981

The Wildlife and Countryside Act 1981 has been amended many times, including by the Countryside and Rights of Way Act 2000. It contains provisions for the notification and regulation of Sites of Special Scientific Interest, and for protected species.

The Regulations regulate the management of land within Sites of Special Scientific Interest, requiring land managers to have the consent of Natural England before carrying out management.

All public bodies are defined as 'S28G' bodies, which have a duty to further the nature conservation of Sites of Special Scientific Interest in the undertaking of their functions. In practice, this prevents planning applications being permitted if they would harm Sites of Special Scientific Interest, as it would be a breach of that duty.

The Act makes it an offence intentionally to kill, injure, or take any wild bird, take, damage or destroy the nest of any wild bird, while that nest is in use or being built, or take or destroy an egg of any wild bird. Special penalties are available for offences related to birds listed on Schedule 1, for which there are additional offences of disturbing these birds at their nests, or their dependent young.

The Act makes it an offence intentionally to kill, injure or take any wild animal listed on Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places. Some species have lesser protection under this Act, for example white-clawed crayfish, common frog and toads are only protected from sale, and reptile species, other than smooth snake and sand lizard, are protected from intentional killing or injury, but they are not protected from disturbance and their habitat is not protected. It is also an offence intentionally to pick, uproot or destroy any wild plant listed in Schedule 8.

National Planning Policy Framework

The National Planning Policy Framework (NPPF) dated July 2021 replaces previous Government Policy in relation to nature conservation and planning expressed in the previous version of the NPPF dated February 2019.

Chapter 15 paragraph 174(d) of the NPPF says that the planning system should contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity.

Paragraphs 175 and 176 relate to policy for designated sites of biodiversity or landscape importance. Local Plan policies should distinguish between the hierarchy of international, national and locally designated sites and allocate land with the least environmental or amenity value and maintain and enhance networks of habitats and green infrastructure. Further policy is within paragraph 179, where Local Planning Authorities should within their Local Plans aim to protect and enhance biodiversity by:

- Identifying, mapping and safeguarding components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- Promoting the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

When determining planning applications Local Planning Authorities should apply the following principles (paragraph 180):

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

- development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

Paragraph 181 adds protection to candidate sites of European or International importance (Special Protection Areas, Special Areas of Conservation and Ramsar sites) and also to those sites identified or required as compensatory measures for adverse effects on habitats sites, potential SPA, possible SAC listed or proposed Ramsar sites.

Paragraph 182 clarifies that the presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a 'habitats' site, i.e. a European site, (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

Government circular 'Biodiversity and Geological Conservation – Statutory Obligations and their Impact Within the Planning System' referenced ODPM 06/2005 has not been replaced and remains valid. It sets out the legislation regarding designated and undesignated sites and protected species and describes how the planning system should take account of that legislation. It does however pre-date the NERC Act 2006 (see below), which includes a level of protection for a further list of habitats and species regardless of whether they are on designated sites or elsewhere.

Natural Environment and Rural Communities (NERC) Act 2006

This Act includes a list of habitats and species of principal importance in England. Local Authorities are required to consider the needs of these habitats and species when making decisions, such as on planning application.

Local Planning Authority's planning policy

The Local Planning Authority will have policies relating to biodiversity conservation.

Species Legislation

The following table provides an overview of legislation with regard to species.

Protected Species	Legislation			
	Wildlife & Countryside Act, 1981	The Conservation of Habitats and Species Regulations, 2017	Natural Environment & Rural Communities (NERC) Act, 2006	Protection of Badgers Act, 1992
Plants (certain 'rare' species)	✓	✓ ¹⁴	✓	
Invertebrates (certain 'rare' species)	✓	✓ ¹⁵	✓	
White-clawed crayfish	✓		✓	
Great crested newt, natterjack toad, pool frog	✓	✓	✓	
Other amphibians	✓ ¹⁶		✓	
Sand lizard, smooth snake	✓	✓ ¹⁷	✓	
Other reptiles	✓ ¹⁸		✓	
Breeding birds	✓	✓	✓	
Wintering birds (certain 'rare' species)	✓	✓	✓	
Bats	✓	✓	✓	
Dormouse	✓	✓	✓	
Water vole	✓		✓	
Otter	✓	✓	✓	
Badger				✓

¹⁴ Nine species present in the UK, with very specialised habitat requirements, are European Protected Species.

¹⁵ Fisher's estuarine moth, large blue butterfly and lesser whirlpool ram's-horn snail are European Protected Species.

¹⁶ The four other native amphibian species (smooth and palmate newts, common frog and common toad) are only protected against trade under this act.

¹⁷ Smooth snake and sand lizard are European Protected Species.

¹⁸ The four other native reptile species (common lizard, slow worm, grass snake and adder) are protected against intentional killing, injury and trade under this act.

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Appendix 2

Assessment Methodology: Valuing Ecological Features and Impact Assessment

The three-stage assessment method for determining ecological value is based upon assessment matrices published in the Handbook of Biodiversity Methods¹⁹. It has been updated to comply with recent changes to planning policy and legislation. The three-stage process allows the value of ecological sites, habitats and populations, and the magnitude of the impact, to be cross-tabulated to identify impact significance.

Valuing ecological sites, habitats and populations: scale and level of value

Scale	Level of value	Sites, habitats and populations
Greater than national	Very High	Statutory sites designated under international conventions or related national legislation, in particular: - Wetlands of International Importance (Ramsar sites), - Special Areas of Conservation, - Special Protection Areas.
National	High	Statutory sites designated under national legislation, for example: - Sites of Special Scientific Interest (England, Wales, Scotland), - National Nature Reserves (UK). Significant viable areas of habitats, or populations or assemblages of species of principal importance for the conservation of biodiversity in England and Wales (Section 41 species and habitats)²⁰ of such size and quality as might qualify for SSSI designation. Populations or assemblages of red-listed, rare or legally protected species, as might qualify for SSSI designation, for example: - species of conservation concern, - Red Data Book (RDB) species, - birds of conservation concern (Red List species), - nationally rare and nationally scarce species, - legally protected species.
County	Medium	Statutory sites of lower conservation value designated under national legislation, for example Local Nature Reserves (UK). Non-statutory sites designated under local legislation, for example: - County Wildlife Sites, - Local Wildlife Sites, - Roadside Nature Reserves (protected road verges). Viable areas of habitat or populations of species of principal importance for the conservation of biodiversity in England and Wales (Section 41 species and habitats)²¹ of such size and quality as might qualify for designation at the county level. Other non-designated sites which meet the criteria for designation at this level.

¹⁹ Hill, D., Fasham, M., Tucker, G., Shewry, M., Shaw, P. (eds.) (2005) *Handbook of Biodiversity Methods: Survey, Evaluation and Monitoring*, Cambridge University Press.

²⁰ Listed under S41 of the Natural Environment and Rural Communities Act 2006 <http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx>.

²¹ Listed under S41 of the Natural Environment and Rural Communities Act 2006 <http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx>.

District/ Borough²²	Lower	Sites meeting criteria for metropolitan designations. Undesignated sites or features not meeting criteria for county designation, but that are considered to enrich appreciably the habitat resource within the local district or borough, for example: • ancient woodland, • diverse, ecological valuable and cohesive hedgerow networks, • significant clusters or groups of ponds, • veteran or ancient trees. Viable areas of habitat or populations of species of principal importance for the conservation of biodiversity in England and Wales (Section 41 species and habitats)²³ not qualifying for designation at the county level.
Parish	Lower	Areas of habitat considered to enrich appreciably the ecological resource within the context of the local parish. Small areas of habitat or populations of species of principal importance for the conservation of biodiversity in England and Wales (Section 41 species and habitats)²⁴.
Site only	Negligible	Ecological feature or resource not meeting any of the above criteria.

Note: there is much overlap in designations and lists of important species, and many sites, habitats and species appear on several. Where a site, habitat or species has multiple designations or levels of protection, normally the highest level would be the level at which impacts are assessed.

²² Including metropolitan boroughs.

²³ Listed under S41 of the Natural Environment and Rural Communities Act 2006 <http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx>.

²⁴ Listed under S41 of the Natural Environment and Rural Communities Act 2006 <http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx>. Listed under S41 of the Natural Environment and Rural Communities Act 2006 <http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx>.

Definitions of impact magnitude

Magnitude (negative or positive)	Definition/trigger
Severe	Loss or severe degradation affecting over 75% of a site feature, habitat or population. Adverse change to, or reduced condition of, over 90% of a site feature, habitat or population, for example through disturbance or trampling.
Major	Loss or severe degradation affecting over 25% of a site feature, habitat or population. Adverse change to, or reduced condition of, over 50% of a site feature, habitat or population, for example through disturbance or trampling. For benefits, an impact equivalent in nature conservation terms to a gain of over 50% in a site feature, habitat or population.
Moderate	Loss or severe degradation affecting over 5% of a site feature, habitat or population. Adverse change to, or reduced condition of, over 10% of a site feature, habitat or population, for example through disturbance or trampling. For benefits, an impact equivalent in nature conservation terms to a gain of 10-50% in a site feature, habitat or population
Minor	Loss or severe degradation affecting up to 5% of a site feature, habitat or population. Adverse change to, or reduced condition of, 1-10% of a site feature, habitat or population, for example through disturbance or trampling. For benefits, an impact equivalent in nature conservation terms to a gain of up to 10% in a site feature, habitat or population.
Insignificant	No loss of or severe degradation to a site feature, habitat or population. Adverse change to, or reduced condition of, less than 1% of a site feature, habitat or population. No benefit to a site feature, habitat or population.

Impact significance

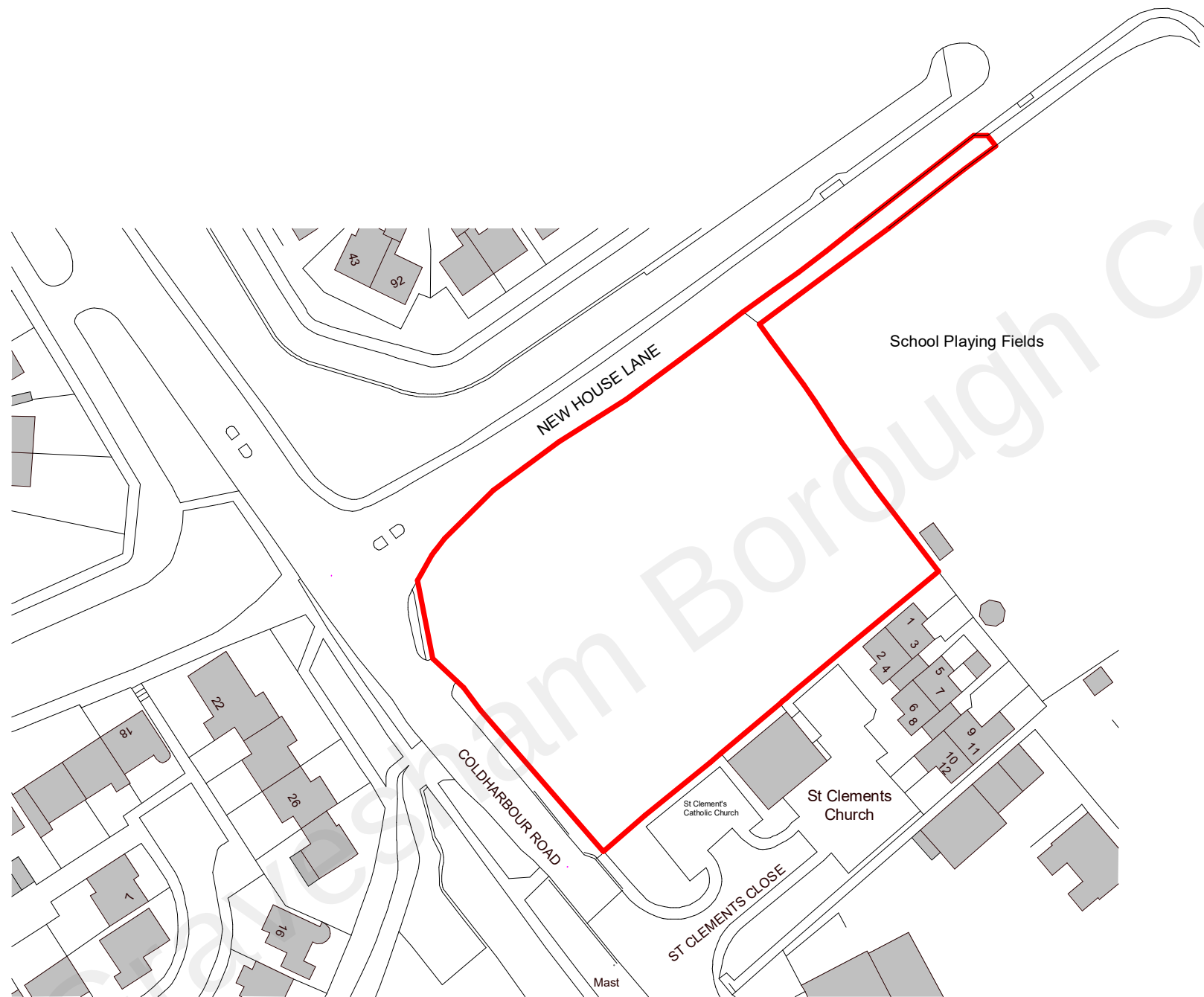
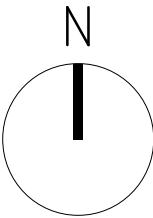
Value of site, habitat or population	Magnitude of impact							
	<i>Severe Negative</i>	<i>Major Negative</i>	<i>Moderate Negative</i>	<i>Minor Negative</i>	<i>Insignificant</i>	<i>Minor Positive</i>	<i>Medium Positive</i>	<i>Major Positive</i>
<i>Very High</i>	Severe Adverse	Severe Adverse	Major Adverse	Major Adverse	Neutral*	Major Beneficial	Major Beneficial	Major Beneficial
<i>National (High)</i>	Severe Adverse	Major Adverse	Major Adverse	Moderate Adverse	Neutral*	Moderate Beneficial	Major Beneficial	Major Beneficial
<i>County/Metropolitan (Medium)</i>	Major Adverse	Major Adverse	Moderate Adverse	Moderate Adverse	Neutral	Minor Beneficial	Moderate Beneficial	Major Beneficial
<i>District/Borough (Lower)</i>	Major Adverse	Moderate Adverse	Moderate Adverse	Minor Adverse	Neutral	Minor Beneficial	Moderate Beneficial	Moderate Beneficial
<i>Parish (Lower)</i>	Moderate Adverse	Moderate Adverse	Minor Adverse	Minor Adverse	Neutral	Minor Beneficial	Minor Beneficial	Moderate Beneficial
<i>Minimal/negligible</i>	Neutral	Neutral	Neutral	Neutral	Neutral	Minor Beneficial	Minor Beneficial	Moderate Beneficial

Where the impact significance falls below Minor Adverse, the term 'Neutral' is used.

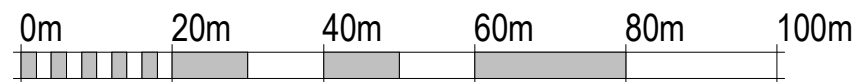
*In some circumstances, some 'insignificant' impacts might fail legislative or policy tests and the impact would be greater than Neutral.

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Appendix 3



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SCALE 1:1000 @ A3

NOTES

All dimensions are in millimetres unless stated otherwise.

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Rev	Date	Description	Drawn By	Checked By
P3	18/08/22	Red Line Amended	SL	AP
P2	09/06/22	Red Line Extended	SL	AP
P1	30/05/22	2nd Draft Issue	SL	AP

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Project:

Project Name
Former Battle of Britain Site,
Coldharbour Road,
Gravesend, DA11 8NT

Client:



Drawing Title:

Location Plan

For Information

HIA Project Number	Scale @ A3	Suitability
3172	1 : 1000	S2

Project	Originator	Volume	Level	Type	Role	Number
3172	HIA	ZZ	XX	DR	A	0101

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Appendix 4

EXTRACT 1, 1:500

Existing bus stop

Proposed path to tie into existing asphalt associated with bus stop

Proposed retaining wall with safety rail located to rear of proposed path, to accommodate changes in levels

Existing grass verge located to rear of proposed retaining wall to be retained

School Playing Fields

Proposed 1.5m wide asphalt path leading to bus stop

Existing railings associated with school fields to be retained

EXTRACT 1

School Playing Fields

Proposed stepped access to entrance

Proposed stepped access to entrance

Proposed wheelchair access to entrance

Proposed cycle stands with canopy cover, to architect's specification

Bin store

Refer to Architects Site Plan for Planning Application Boundary

St Clements Church

Refer to Architects Site Plan for Planning Application Boundary

	Existing trees are vegetation to be retained with Root Protection Areas indicated in magenta		Proposed Breendon gravel below pleached tree
	Existing tree or vegetation to be removed		Proposed water feature/sculptural features - to provide sensory stimulation and focal point within courtyard garden.
	Proposed native feature tree		Proposed raised timber planters
	Proposed ornamental tree		Proposed fixed timber seat with armrests and backrests
	Proposed native species tree		Proposed non-fixed seating area with tables
	Proposed pleached tree		Proposed shed
	Proposed specimen shrubs		Proposed canopy sail
	Proposed medium height shrub planting		Proposed sculpture / bird feeder
	Proposed mixed species native shrub planting		Proposed 1.8m high metal vertical railing with secure gates for maintenance access
	Proposed evergreen hedgerow - To perimeter of site hedgerow to be managed to a height of 1.8m. Within central courtyard, hedgerow to be managed to a height of 0.6m		Proposed 1.8m high timber close board fence with hedgehog gaps within base of fence
	Proposed mixed species native - Hedgerow managed to a height of 1.5m		Existing metal railings to be retained
	Proposed amenity grass (Frequently mown)		Proposed brick faced retaining wall, height varies
	Proposed wildflower meadow - such as EM 2 Standard Meadow Mix by Ecorigate Seeds or similar approved.		Proposed timber knee rail
	Proposed climbing shrubs, grown up blank facade of building		Proposed decorative/patterned metal railing / guard rail, timber knee rail - located to northern entrance footpath entrance
	Proposed asphalt		Proposed / Existing Banking
	Proposed block paving		Proposed signage - located to southern footpath entrance
	Proposed resin bound surfacing		Existing grass verge to be retained
	Proposed feature paving		Proposed public art location. Section of metal boundary railing to be made bespoke, with motif or design reflecting the name of the former public house, 'Battle of Britain'. Size, location and design of art to be agreed via Planning Condition
	Proposed private patios		
	Areas of no-dig construction method		

RG	14.11.2022
OT	22.08.2022
OT	07.06.2022
By	<u>Date</u>

Bedford	01234 261315	☒
Woodbridge	01394 380509	☐
London	020 3092 4141	☐
Norwich	01603 230777	☐

Job No.	B22032
Dwg. No.	102C
Scale	1:250@A2
Drawn	RG
Checked	OT
Date	17.05.2022

North



Do not scale off drawing. All dimensions & Levels are to be checked on site. Any discrepancies must be reported to the landscape architect immediately.
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St Clements Church

Refer to Architects Site Plan for Planning Application Boundary

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Appendix 5

Kent & Medway Biological Records Centre

Map showing the statutory and non-statutory designated sites,
ancient woodland and water features at
Battle Of Britain Pub, Gravesend
Nick Sibbett, The Landscape Partnership
ENQ/22/142 06/04/2022

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Kent & Medway Biological Records Centre would like to acknowledge, where appropriate: Natural England for Ramsar, SAC, SPA, NNR, SSSI, AONB, Heritage Coast and Ancient Woodland data; Kent Wildlife Trust for LWS, RNR and Reserve data; GeoConservation Kent for RIGS data; The National Trust, The RSPB and The Woodland Trust for Reserve data; Kent County Council for Kent Habitat Survey 2012 data used in this map.

0 0.25 0.5 1 Kilometres

563000 000000

564000 000000

565000 000000



KEY

-  Study Area
-  Site Point
-  Water Feature



