Preliminary Ecological Appraisal

March 2024

Land North-East of Humber Doucy Lane, Ipswich

Prepared by
CSA Environmental

On behalf of
Barratt David Wilson Homes
& Hopkins Homes

Report No: CSA/6675/01

CSA environmental

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This report may contain sensitive ecological information. It is the responsibility of the Local Authority to determine if this should be made publicly available.

Report Reference	Revision	Date	Prepared by	Approved by	Comments
CSA/6675/01	-	12/01/2024	CH	JW	
	A	01/03/2024	CH	JW	Small amendments, as requested by client

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EXECUTIVE SUMMARY

Residential development is proposed at Land north-east of Humber Doucy Lane, Ipswich, for which outline planning permission will be sought.

CSA Environmental was instructed by Barratt David Wilson Homes and Hopkins Homes to undertake a Preliminary Ecological Appraisal (PEA) of the Site to identify any ecological constraints to development, inform scheme design, highlight opportunities for ecological enhancement/Biodiversity Net Gain and determine the need for any additional investigation/survey. As part of this PEA, a desk study and field survey of the Site were undertaken in August 2023, including a UK Habitat Classification survey.

No nature conservation designations are present on site or adjacent to it. Further consideration should be given to European sites on the Suffolk Coast and their potential to be indirectly affected by the proposed development via recreational pathways.

The Site is dominated by arable land and modified grassland of limited ecological interest, with narrow field margins. Greater interest is associated with field hedgerows and small areas of woodland and scrub habitat. Subject to the retention of these higher interest habitats, and the suitable provision of open space, there is potential to deliver net gains for biodiversity within the Site.

The Site has the potential to support a number of protected or notable species, with recommendations set out for surveys to be undertaken. Recommendations have also been provided for ecological enhancement measures that could be delivered as part of the proposed development.

1.0 INTRODUCTION

1.1 This report has been prepared by CSA Environmental on behalf of Barratt David Wilson Homes and Hopkins Homes. It sets out the findings of a Preliminary Ecological Appraisal (PEA) of Land North-East of Humber Doucy Lane, Ipswich (hereafter referred to as 'the Site'). Residential development is proposed at the Site, for which outline planning permission will be sought.

1.2 The scope of this appraisal has been determined with due consideration for best-practice guidance provided by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2017), and to the *Biodiversity: Code of practice for planning and development* (BS 42020:2013) published by the British Standards Institution (2013).

1.3 The Site occupies an area of c. 31.52ha and is located around central grid reference TM 1869 4672, to the north-east of Ipswich, Suffolk. It consists of four land parcels. The northern and central land parcel are comprised of arable fields with narrow field margins and hedgerows. Small areas of broadleaved woodland are present along the western boundary of the central land parcel, and two areas of neutral grassland are also present to the east and west of the northern parcel. The western-most land parcel is comprised entirely by dense mixed scrub. The southern-most land parcel is split in two, with modified grassland to the west and arable land to the west (see Habitats Plan in Appendix A).

1.4 This PEA aims to:

- Characterise baseline ecological conditions of the Site and its wider context
- Identify any ecological constraints to development of the Site
- Inform scheme design
- Identify further ecological surveys and investigation necessary to inform a full Ecological Impact Assessment (EcIA) of the Site
- Highlight opportunities for ecological enhancement and Biodiversity Net Gain (BNG)

1.5 To achieve these aims, an ecological desk study and field survey were undertaken of the Site, the findings of which are presented herein.

1.6 As set out in best practice guidelines (CIEEM, 2017) a PEA is typically only suitable for planning submission where there are no ecological constraints relating to the project. Where ecological constraints are identified, such as the presence of important ecological features, the effects of development on these features should be assessed within a separate EcIA report, which would supersede the PEA.

2.0 LEGISLATION, PLANNING POLICY & STANDING ADVICE

Legislation

2.1 Legislation relating to wildlife and biodiversity of particular relevance to this PEA includes:

- The Conservation of Habitats and Species Regulations 2017 (as amended)
- The Wildlife and Countryside Act 1981 (as amended)
- The Natural Environment and Rural Communities (NERC) Act 2006
- The Protection of Badgers Act 1992
- The Environment Act 2021

2.2 This above legislation has been addressed, as appropriate, in the production of this report. Further information on the above legislation is provided in Appendix B.

National Planning Policy

2.3 The National Planning Policy Framework (NPPF) (Department for Levelling Up, Housing & Communities, 2023) sets out the government planning policies for England and how they should be applied. Chapter 15: Conserving and Enhancing the Natural Environment, is of particular relevance to this report as it relates to ecology and biodiversity. Further details are provided in Appendix B.

2.4 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their effects within the planning system.

Local Planning Policy

2.5 A number of local planning policies relate to ecology, biodiversity and/or nature conservation. These are summarised in Table 1 of Appendix B. These policies have been addressed, as appropriate, in the production of this report.

Standing Advice

2.6 Natural England and Defra's Standing Advice (Natural England & Defra, 2014) regarding habitats and protected species aims to support local authorities and forms a material consideration in determining applications in the same way as any individual response received from Natural England following consultation. Standing advice has therefore been given due consideration, alongside other detailed guidance documents, in the production of this report.

3.0 METHODS

Desk Study

3.1 An ecological desk study was undertaken in August 2023 comprising a review of online resources and biological records centre data as detailed below.

3.2 The Multi-Agency Geographic Information for the Countryside (MAGIC) online database was reviewed to identify nature conservation designations within the following search radii:

- Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar sites within 10km of the Site (including possible/proposed sites)
- Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Local Nature Reserves (LNR) within 3km of the Site
- Other relevant data e.g. Ancient Woodland Inventory within 1km of the Site

3.3 A review was undertaken of the location of any such designations, their distance from and connectivity with the Site, and the reasons for their designation. This information was used to determine whether they may be within the proposed development's Zone of Influence (ZoI).

3.4 Suffolk Biodiversity Information Service (SBIS) was contacted for details of any non-statutory nature conservation designations and records of protected/notable habitats and species. This information was requested for an area encompassing the Site and adjacent land within c. 2km of its central grid reference. This search area was selected to include the likely zone of influence upon non-statutory designations and protected or notable habitats and species.

3.5 Further online resources were reviewed for information which may aid the identification of important ecological features. The Woodland Trust's online Ancient Tree Inventory was reviewed for known ancient or veteran trees within the Site and adjacent land. Interactive online mapping provided by the charity 'Buglife' was used to determine whether the Site falls within an Important Invertebrate Area.

3.6 In accordance with Natural England's Great Crested Newt Mitigation Guidelines (2001), a desktop search was undertaken to identify ponds within 500m of the Site which may have potential to support breeding great crested newts *Triturus cristatus*, using Ordnance Survey (OS) mapping, the MAGIC database and aerial photography.

3.7 Where possible under the terms of the data provider, relevant desk study data are presented in Appendix C.

Field Survey

3.8 A UK Habitat Classification ('UKHab') survey was carried out in fine and dry weather conditions on 16 August 2023 by Carly Howes ACIEEM, encompassing the Site and immediately adjacent habitats that could be viewed.

3.9 UKHab is a unified and comprehensive system for mapping and classifying habitats, designed to provide a simple and robust approach to surveying and monitoring, and replaces Phase 1 Habitat survey methods. The method allows for identification of important habitat types, including habitats of Principal Importance under Section 41 (S41) of the NERC Act (2006) and Habitats Directive Annex I habitats. This method also allows for direct translation of habitats into the current Statutory Biodiversity Metric.

3.10 The following parameters were adopted for the UKHab survey undertaken for this PEA:

- UKHab Professional edition (Butcher *et al.*, 2020, commercial End User Licence Agreement (EULA))
- Minimum Mappable Unit (MMU):
    - $10m^2$/0.001ha (polygons)
    - 5m (linear)
- Primary Habitats recorded to a minimum of Level 2 (see below) with UKHab codes provided
- Mandatory secondary codes used
- Base-mapping comprising a combination of aerial imagery and topographic information

3.11 Primary Habitats are recorded to a minimum of Level 2. Where the survey is conducted at an appropriate time of year (e.g. May to July for grassland) habitats may be recorded to Level 3, 4 or 5, only if conditions and the experience of the surveyor allow.

3.12 Alongside the UKHab survey, additional field survey information was collected, comprising:

- Detailed floral species lists recorded for each identified habitat/parcel
- Further habitat condition information based upon current Statutory Biodiversity Metric condition assessment guidance
- Evidence of, or potential for, European Protected Species (EPS) (including bats, great crested newt, dormouse and otter)
- [redacted])
- Evidence of, or potential for, other notable species (including S41 Species of Principal Importance as well as notable, rare, protected or controlled plants and invertebrates)

- Any other survey information relevant to ecological matters

3.13 Results of the UKHab survey are presented on the Habitats Plan in Appendix A. Appendix D provides photographs of the habitats at the Site and Appendix E provides a list of floral species recorded in each habitat parcel. Nomenclature for higher plants within this report is consistent with the fourth edition of The New Flora of the British Isles (Stace, 2019).

Limitations

3.14 There were no specific limitations to the desk study or field survey, which was conducted at an optimum time of year and in good conditions.

Evaluation and Assessment

3.15 The evaluation and assessment of ecological features is beyond the scope of a PEA and has therefore not been undertaken here. Formal evaluation and assessment of any identified important ecological features should be undertaken as part of either a full EcIA, or receptor-specific survey and assessment in accordance with the published CIEEM method (CIEEM, 2018).

4.0 BASELINE ECOLOGICAL CONDITIONS

Nature Conservation Designations

Statutory

4.1 There are no statutory designations covering any part of the Site.

4.2 A total of four international statutory designations were identified within 10km of the Site. These were the Deben Estuary RAMSAR, the Deben Estuary SPA, the Stour and Orwell Estuaries RAMSAR and the Stour and Orwell SPA, as described in the table below.

4.3 Sandlings SPA lies over 10km from the Site (c. 11.0km east). The Site lies within the Zone of Influence of this designation and therefore the SPA has been included within Table 1 and the discussion below on this basis.

4.4 A single national statutory designation was identified within 3km of the Site. This was the Sinks Valley SSSI, shown in the table below.

4.5 A total of three local statutory designations were identified within 3km of the Site. These were the Sandlings LNR, Mill stream LNR and The Dales Open Space LNR, shown in the table below.

Non-Statutory

4.6 A total of five non-statutory designations were identified within 2km of the Site. These were the Pumping Station Meadow Local Wildlife Site (LWS), Rushmere Heath LWS, Playford Alder Carr LWS, Welhams Meadow and Copse LWS, and Christchurch Park LWS. These non-statutory designations are described in Table 1 below.

Table 1. Statutory and Non-Statutory Designations within search radii

Site Name & Designation	Distance & Direction from Survey Area	Special Interests or Qualifying Features
International Designations within 10km		
Deben Estuary RAMSAR	c. 4.8km south	A sheltered estuary with areas of saltmarsh and intertidal mudflats. The site supports internationally and nationally important flora and fauna such as dark-bellied Brent goose *Branta bernicla* which winter at the site.
Deben Estuary SPA	c. 4.8km south	Saltmarshes and intertidal mudflats occupy most of the site but there are also areas of reed swamp, unimproved neutral grassland and scrub. The site is designated for supporting nationally important numbers of avocet *Recurvirostra avosetta*, an Annex 1 species. Further Annex 1 species wintering on the site include golden

		plover *Pluvialis apricaria*, hen harrier *Circus cyaneus* and short-eared owl *Asio flammeus*. The site also qualifies for regularly supporting internationally important numbers of dark-bellied geese, *Branta bernicula*. The estuary is more important for many species of waterfowl in years when severe weather reduces food resources available on the continent.
Stour and Orwell Estuaries RAMSAR	c. 6.7km east	An estuary with extensive mudflats, low cliffs, saltmarshes and areas of vegetated shingle. The site supports internationally and nationally important numbers of numerous species of wintering wildfowl and waders. Several nationally scarce plants and invertebrates occur.
Stour and Orwell Estuaries SPA	c. 6.7km east	The estuaries include extensive mud-flats, low cliffs, saltmarsh and small areas of vegetated shingle. The mudflats hold *Enteromorpha*, *Zostera* and *Salicornia* spp. In summer, the site supports important numbers of breeding avocet *Recurvirostra avosetta*, while in winter it holds major concentrations of waterbirds, especially geese, ducks and waders. The site is designated as it is used regularly by 1% or more of the Great Britain populations of the following species listed in Annex I in any season, and as it is used regularly by over 20,000 waterbirds (as defined by the Ramsar Convention) in any season.
Sandlings SPA	c. 11.0km east	The heaths support both acid grassland and heather-dominated plant communities, with dependant invertebrate and bird communities of conservation value. *Woodlark Lullula arborea* and Nightjar *Caprimulgus europaeus* breed in the large conifer forest blocks onsite, which is the qualifying feature of this designation.
National Designations within 3km		
Sinks Valley SSSI	c. 2.9km east	This site is one of the few remaining valleys within the Suffolk Coast and Heaths Natural Area that are almost entirely occupied with semi-natural vegetation. It contains several habitats including open water, fringing swamps, spring-fed fen, wet grassland, wet alder woodland, dry acidic grassland, heathland and oak woodland. It is the diversity of habitats that makes the valley special. The nationally scarce plant, mossy stonecrop *Crassula tillaea* can be found along pathways.
Local Designations within 3km		

Sandlings LNR	c. 2.1km south-east	The site is a mosaic of woodland, scrub, heathland, grassland and mature hedgerows. The dense scrub provides habitat for birds such as nightingale *Luscinia megarhynchos*. The site is particularly important for butterflies, with 27 species recorded on the reserve.
Mill Stream LNR	c. 2.3km south-east	There is fen, scrub, annually-cut willow and pond habitats on site which support a variety of flora species such as southern marsh-orchid *Dactylorhiza praetermissa*, and fauna such as amphibians, reptiles and dragonflies.
The Dale Open Space LNR	c. 2.6km west	The site is a former brick works and now comprises woodland, meadows and ponds.
Non-Statutory Designations within 2km		
Pumping Station Meadow LWS	c. 0.5km north-east	The site is a mosaic of scrub and fen meadow, fed by springs. It supports a diverse assemblage of flora including a large population of southern marsh orchid *Dactylorhiza praetermissa*. The grassland on the higher ground shifts into scrb on the drier ground which provides opportunities for invertebrates and nesting birds. Priority species recorded here include barn owl *tyto alba*, nightingale *Luscinia megarhynchos* and grass snake *Natrix natrix*.
Rushmere Heath LWS	c. 1.2km south-east	Rushmere Heath is a registered common that contains an extensive golf course and network of public footpaths. The common comprises of heather *Calluna vulgaris*, acid grassland and areas of scrub. Bluebells *Hyacinthoides non-scripta* are present onsite along with grass snake *Natrix natrix*, slow-worm *Anguis fragilis* and lizard *Zootoca vivipara*.
Playford Alder Carr LWS	c. 1.6km east	An ancient deciduous wet woodland which lies in the Fynn Valley. Areas of standing water are fed by springs forming a pond. The flora includes bluebells *Hyacinthoides non-scripta* on the slope rising to the railway line and other plants indicative of ancient woodland. There is a well-used public footpath running through the wood.
Welhams Meadow and Copse LWS	c. 1.7km north	This unimproved meadow is situated on a gentle valley with wet flushes and associated springs. The meadow also supports a population of the scarce heath spotted orchid *Dactylorhiza maculata*. Ancient hedgerows border the meadow providing habitat for invertebrates and birds. Some of the hazels *Corylus* sp. are ancient and form a small copse to the north of the

		meadow.
Christchurch Park LWS	c. 2km south-west	The site is predominantly formal amenity parkland which contains mature woodland, scrub, two ponds, an orchard and restored meadow. The park contains several veteran oaks and sweet chestnut. A wide range of birds is also supported by the site.

Ancient Woodland

4.7 There is no ancient woodland, as shown on the ancient woodland inventory, covering any part of the Site or immediately adjacent land.

4.8 No trees on or adjacent to Site are listed on the Ancient Tree Inventory. However, there is a single pedunculate oak *Quercus robur* tree labelled "notable" in close proximity to the two land parcels at the north-west of the Site, adjacent to the intersection of Humber Doucy Lane and Tuddenham Road.

Habitats and Flora

4.9 Habitats recorded on-site are illustrated in Appendix A with detailed species lists provided in Appendix E. Relevant UKHab codes are provided within parentheses for each habitat type recorded [e.g. Other Neutral Grassland (g3c)].

Notable Flora Records

4.10 SBIS provided 35 records of 27 notable plant species from within the search area. Those of potential relevance to the Site include common cudweed *Filago vulgaris*, field scabious *Knautia arvensis* and shepherd's-needle *Scandix pecten-veneris*.

4.11 Three recorded species are listed within the Wildlife and Countryside Act's Schedule 9 list of invasive non-native species including variegated yellow archangel *Lamiastrum galeobdolon* subsp. *argentatum*, Himalayan balsam *Impatiens glandulifera* and wall cotoneaster *Cotoneaster horizontalis*. A single record of Himalayan balsam recorded c. 0.3km east of the Site is the closest of these records. However, this record is only accurate down to 1km and its likely this record is associated with a watercourse or waterbody within 1km of the point. These species were not recorded during the survey.

Arable Field and Field Margins (c1c)

4.12 The Site is dominated by arable fields, which are separated into three distinct fields within separate land parcels. Field F1 is at the north of the Site, adjacent to the railway line and Tuddenham Road. Field F2 dominates the largest, central land parcel, and Field F4 is located to the south-east of the Site, adjacent to Seven Cottages Lane.

4.13 At the time of the initial Site survey, F1 and F4 were sown with broad bean crop, and F2 was sown with a wheat crop. Historical imagery shows that these fields have been in arable cultivation for at least the last 23 years. The arable field margins are generally narrow – up to c. 2m wide, c. 1.25m in height, and are dominated by common and widespread grass species including false oat-grass *Arrhenatherum elatius*, soft-brome *Bromus hordeaceus*, cock's-foot *Dactylis glomerata*, perennial rye-grass *Lolium perenne* and barren brome *Anisantha sterilis*. Ground flora present includes fat-hen *Chenopodium album*, scarlet pimpernel *Anagallis arvensis*, cow parsley *Anthriscus sylvestris*, creeping thistle *Cirsium arvense*, dove's-foot crane's-bill *Geranium molle,* bristly oxtongue *Helminthotheca echioides* and red dead-nettle *Lamium purpureum*.

Modified Grassland (g4)

4.14 Field F3 is comprised of modified grassland which is used for recreation and by the Ipswich Rugby Club adjacent to the north. The grassland continues off-site to the west. The grassland is mown short (up to c. 10cm), with the field margins to the north and south up to c. 1.5m in places.

4.15 F3 is dominated by perennial rye-grass, with false oat-grass, common couch *Elytrigia repens*, wall barley *Hordeum murinum*, soft brome *Bromus hordeaceus* and Timothy *Phleum pratense* also present. Herb species here include white clover *Trifolium repens*, ribwort plantain *Plantago lanceolata*, dandelion *Taraxacum officinale* agg., and scentless mayweed *Tripleurospermum inodorum*.

Mixed Scrub (h3h)

4.16 A triangular land parcel comprising mature mixed scrub is present at the north-west of the Site, located at the intersection between Humber Ducy Lane and Tuddenham Road.

4.17 The dense scrub is well established (c.5m height) and comprises blackthorn *Prunus spinosa*, elder *Sambucus nigra*, hawthorn *Crataegus monogyna*, hazel *Corylus avellana*, bramble *Rubus fruticosus* agg., and butterfly-bush *Buddleja davidii*. An area of cherry plum *Prunus cerasifera* is also present at the northern corner. The ground flora is dominated by common nettle *Urtica dioica*, with frequent creeping thistle, garlic mustard *Alliaria petiolata*, burdock *Arctium* sp., red dead-nettle, green alkanet *Pentaglottis sempervirens*, hedge mustard *Sisymbrium officinale*, and lords-and-ladies *Arum maculatum* also present. Much of this land parcel is impenetrable due to the density of the scrub vegetation.

4.18 Around the perimeter of the scrub, there are a number of mature and semi-mature trees (see below for details).

Other Woodland – Broadleaved (w1g)

4.19 Two areas of broadleaved woodland (W1 and W2) are present adjacent to the north-eastern Site boundary and F2.

4.20 The largest of these woodlands is W1, a woodland block c. 0.3ha in area. This woodland s c. 7-20m in height, with a patchy understorey throughout the majority of the woodland. Woody species present include pedunculate oak, hornbeam *Carpinus betulus*, small-leaved lime *Tilia cordata*, ash *Fraxinus excelsior*, blackthorn, hawthorn, cherry plum, bramble and dog rose *Rosa canina*. Some small areas of deadwood, scrub and tall ruderal are located and the eastern and western ends of the woodland. Where present, the ground flora is dominated by wood false-brome *Brachypodium sylvaticum*, with ground ivy *Glechoma hederacea*, cow parsley, broad-leaved dock *Rumex obtusifolius*, cleavers *Galium aparine*, self-heal *Prunella vulgaris*, wood avens *Geum urbanum*, field forget-me-not *Myosotis arvensis* and willowherb *Epilobium hirsutum* also present.

4.21 The woodland does not appear to be subject to any regular management regime, other than periodic flailing from the southern boundary, adjacent to the arable field F2. Ariel imagery from the year 2000 shows the woodland as newly planted, with lines of young trees visible. Before this time, the woodland appears to have been part of F2 and subject to the same arable crop cultivation.

4.22 Woodland W2 is a linear wooded belt of young and semi-mature trees, which lies adjacent to the residential garden of 'Allen's House', the quiet lane and northern corner of F2. As with W1, historical aerial imagery indicates that this woodland was planted in the early 2000's, and before this time was a wider field margin of the arable field F2. Some of the small trees within the woodland still have plastic protective collars around the trunks.

4.23 W2 is c. 0.07ha in total area, approximately 100m in length and c. 14m at its widest point. At its southern end, the woodland merges with trees encroaching out from the adjacent residential garden. The trees within W2 are up to c. 8m in height, with evidence of previous management noted.

4.24 Woody species present within W2 includes elm *Ulmus* sp., horse chestnut *Aesculus hippocastanum*, ash, hornbeam, pedunculate oak, field maple *Acer campestre*, small-leaved lime, field rose *Rosa arvensis* and bramble. At the time of the survey, very little ground flora was present, with the woodland floor heavy shaded from the canopies above. Ground flora which is present is dominated by wood false-brome, dock *Rumex* sp. and ivy *Hedera helix*. Other species noted include wood avens, barren brome, lords-and-ladies, garlic mustard

and cleavers. The majority of these ground flora species were recorded close to the woodland edges.

Other Neutral Grassland (g3c)

4.25 Two areas of other neutral grassland are present within the northern-most land parcel, adjacent to F1.

4.26 The grassland in the north-eastern corner is up to c. 30cm in height and covers an area of approximately 0.1ha. Ground flora present here includes burdock, common nettle, dandelion, white clover, green alkanet, small-flowered crane's-bill *Geranium pusillum*, broad-leaved dock, ragwort *Jacobaea vulgaris*, perforate St. John's-wort *Hypericum perforatum*, ribwort plantain, creeping thistle, cut-leaved crane's-bill Geranium dissectum, nipplewort *Lapsana communis* and scentless mayweed. Of the grass species, false oat-grass and common couch are most abundant, with perennial rye-grass, soft brome, Yorkshire fog *Holcus lanatus*, and cock's-foot also present.

4.27 The grassland in the south-western corner is smaller (c. 0.04ha) and is of a longer sward height, with tussocks up to c.1.5m tall. This area of grassland is more floristically diverse, with additional herb species present including germander speedwell *Veronica chamaedrys*, creeping buttercup *Ranunculus repens*, meadow buttercup Ranunculus acris, vetch sp. *Vicia* sp., bristly oxtongue, spotted medick *Medicago arabica*, mouse-ear chickweed *Cerastium fontanum*, and garlic mustard.

4.28 Additional grasses recorded here include fescue sp. *Festuca* sp., and wood false-brome, with the most abundant grasses being cock's-foot and false oat-grass.

Hedgerows – Priority Habitat (h2a)

Hedgerows

4.29 Hedgerows H1 – H8 are all boundary hedgerows of the arable field F2.

4.30 Hedgerow H1 runs for c. 0.36km and forms the southern-eastern boundary of F2. Woody species within this hedgerow include blackthorn, field maple, hawthorn, dogwood *Cornus sanguinea*, elder, ash, spindle *Euonymus europaeus*, apple *Malus* sp., horse chestnut, elm, hazel, snowberry *Symphoricarpos albus*, and dog rose. Six semi-mature field maple trees up to c. 9m in height are also present within H1. On average, this hedge is c. 5m tall and c. 2-5m wide, becoming wider at the north where snowberry, blackthorn, elder and apple sp. shrubs are encroaching from hedge into the field margin. A shallow dry ditch runs under the hedge on the eastern side. At the time of the survey H1 did not appear to have been recently managed, although previous management from the on-site arable field was noted. A

number of birds nests [redacted] were also noted in relation to H1 (see below for more details).

4.31 Hedgerow H2 is c. 0.07km long, located to the south of the off-site water tower and residential gardens (west of W1). This hedge is unmanaged and up to c. 10m in height. Woody species within H2 include elm, hornbeam, blackthorn, hawthorn, sycamore *Acer pseudoplatanus*, field rose, bramble, and white bryony *Bryonia dioica*. A group of young sycamore (c. 6m tall), semi-mature poplar *Populus* Spp. trees (c. 8m tall) and an c. 8m tall field maple are located off-site to the north, adjacent to H2.

4.32 Hedgerow H3 runs for c. 0.2km around the north east of F2, adjacent to the off-site residential gardens of 'Allen's House' and Lacey's Farm to the north. This hedgerow is up to c. 12m tall and is comprised of semi-mature field maple, ash, hawthorn, sycamore, and elm, with an understorey of hawthorn, blackthorn, elder and hornbeam c. 3m tall. White bryony, field rose, bramble and ivy are also present. This hedge does not appear recently managed and is up to c. 5m wise. There is a shallow dry ditch as the base of the hedge.

4.33 Hedgerow H4 is c. 0.05km in length and is located to the south of W2, adjacent to the residential garden of 'Allen's House' (off-site). H4 is dominated by hawthorn c. 3m in height, with occasional elder and ivy also present. Three semi-mature cherry plum trees c. 5.5m tall are located behind H4 to the north. There is evidence of historical management of this hedge from the arable field side.

4.34 Hedgerow H5 is located along the northern boundary of F2, adjacent to the quiet lane. This hedgerow is c. 0.34km long, c. 2.5m tall and c. 1.5m wide, becoming wider (up to c. 4m) at the western end. H5 has a drainage ditch at its base and does not appear to have been recently managed, although is likely to be managed regularly from both the arable field and lane sides to prevent encroachment. This hedgerow is comprised of an understorey of blackthorn, hawthorn, elm, field maple, elder, cherry plum, bramble, field rose, black bryony *Dioscorea communis* and traveller's joy *Clematis vitalba*, with semi-mature and mature pedunculate oak, sycamore and field maple trees up to c. 20m in height along its length.

4.35 Hedgerow H6 is at the north-western corner of F2. This hedgerow is c. 3m in height, c. 2m wide and runs for c. 0.1km. H6 is comprised of hornbeam, blackthorn, field maple, elder, dogwood, hawthorn, and wych elm *Ulmus glabra*, and does not appear to have been recently managed.

4.36 Hedgerow H7 is a short (c. 0.04km long) beech *Fagus sylvatica* dominated hedge which is located at the west of F2, adjacent to off-site residential gardens of 'Westerfield House Cottage' to the north. H7

is c. 1.5m wide, and c. 5m tall. Other species within the hedge include bramble, laurel *Prunus* Spp. and dog rose. A group of three Monterey cypress *Cupressus macrocarpa* c. 15m tall are present at the western end of H7, next to Humber Doucy Lane.

4.37 Hedgerow H8 runs for c. 0.5km along the south-western boundary of F2, adjacent to Humber Doucy Lane. This hedge is up to c. 3m in height, c. 1.5-3m wide and appears to have been historically from both the arable field and roadsides. H8 is gappy and leggy in places, and there is a dry drainage ditch at its base. This hedgerow is dominated by blackthorn, with dog rose, field maple, hawthorn, elm, sycamore, pedunculate oak, ash, bramble, traveller's joy, ivy and dog rose also present.

4.38 Hedgerows H9 – H13 are all boundary hedgerows of southern-most land parcel, bordering F3 (modified grassland) and F4 (arable field):

4.39 Hedgerow H9 runs along the northern boundary of F3, continuing off-site to the west. This hedge shows evidence of previous management and is c. 2.5m wide, and c. 3m tall. H9 is dominated by hawthorn, with abundant blackthorn and bramble, field rose, dogwood, an oak sapling and ivy. There is a mature pedunculate oak tree (c. 16m tall) to the north of H9, off-site.

4.40 Hedgerow H10 continues east from H9, running along the northern boundary of F3 and the northern boundary of F4 for c. 0.2km. This hedgerow is up to c. 5m wide in places, with a shrubby understorey upwards of 3m in height. The understorey is comprised of hawthorn, blackthorn, field maple, English elm *Ulmus procera*, ash, elder, oak, bramble, walnut *Juglans regia*, ivy, white bryony, and traveller's joy. Mature trees c. 8-21m in height include two field maples and two pedunculate oak trees, one of which has substantial bat roosting potential.

4.41 Hedgerow H11 is located at the north-eastern corner of F4, adjacent to Seven Cottages Lane. This mature hedge with trees is c. 1.5m wide, c. 10m tall and c. 0.06km long with a shallow dry ditch at its base. Species within H11 include elm, field maple, ash, sycamore, hawthorn bramble, and ivy.

4.42 Hedgerow H12 is c. 0.04km long and forms the southern boundary of F4, also adjacent to Seven Cottages Lane. This hedge is c. 2.5m tall, c. 2m wide and is dominated by English elm, with field maple, sycamore, and bramble also present.

4.43 Hedgerow H13 runs for c. 0.4km along the southern boundary of F3 and western boundary of F4, continuing off-site to the east. H13 does not appear recently managed, however there is evidence of historical management from both the roadside (Humber Doucy Lane) and from

the field sides. This hedgerow is c. 2-4m tall and c. 4m wide. The section of hedge adjacent to F4 is dominated by blackthorn, with the section next to F5 dominated by elm. Other woody species and climbers within the hedge include hawthorn, field maple, elder, dogwood, ash, holly *Ilex aquifolium*, field rose, bramble, ivy, and black bryony.

4.44 Hedgerows H14 and H15 are boundary field hedgerows of the arable field F1, at the north of the Site.

4.45 Hedgerow H14 forms the southern boundary of F1 and runs adjacent to the quiet lane (parallel to H5 - see above). This mixed-species hedgerow is c. 0.41km long, c. 2m wide, and is c. 2.5m in height along the majority of its length. H14 is comprised of blackthorn, hawthorn, English elm, field maple, field rose, elder, white bryony, traveller's joy, bramble, ivy, and black bryony. A group of cherry plum trees c. 6m tall is present at the north-eastern end of the hedgerow, and nine semi-mature and mature ash, pedunculate oak, and field maple trees up to c. 21m in height are spread along the hedge line. These mature trees are particularly valuable ecologically given their age and features, which are suitable for roosting bats, nesting birds and invertebrates. There is a shallow dry ditch at the base of H14, and the hedge shows evidence of historical management.

4.46 Hedgerow H15 forms the north-western boundary of F1, running for c. 0.1km adjacent to Tuddenham Road. This hedgerow is c. 2m wide and does not appear to be recently managed, although is likely subject to management from both the road and field sides to prevent encroachment. H15 is dominated by English elm c. 7m in height, with hawthorn, blackthorn, field maple, bramble, white bryony and ivy also present. A group of six English elm and a single field maple c. 8.5m in height is present at the northern end of H15.

4.47 Hedgerows are included within Suffolk BAP. In addition, all of the on-site hedgerows are likely to qualify as priority habitats under S41 of the NERC Act (2006), given their composition (i.e. 80% or more of at least one native woody species) and may be considered potentially important hedgerows under the Hedgerows Regulations (1997). The Hedgerow Survey Handbook (Defra, 2007) defines a species-rich hedgerow as that which contains at least five native woody species. H1, H2, H3, H5, H6, H8, H9, H10, H11, H13, H14 and H15 are therefore all considered species rich.

4.48 The on-site hedgerows have intrinsic ecological importance, providing functional importance through providing connectivity across the Site, as well as contributing to the wider hedgerow network within the local landscape. The hedgerows also provide opportunities for wildlife and have the potential to support a range of notable and protected fauna.

Trees

4.49 A number of mature and semi-mature trees bound the scrub-dominated land parcel at the north-west of the Site. These trees are located adjacent to Humber Doucy Lane (to the east), Tuddenham Road (to the north) and on top of the steep bank of a drainage ditch (to the south). These trees include oak, sycamore, and ash trees up to c. 17m in height.

4.50 Small groups of younger trees and shrubs up to c. 9.5m tall are also present around the boudnaries of the land parcel. Species include ash, elder, English elm, cherry plum, sycamore, hawthorn and silver birch *Betula pendula*, as well as a single mature pear *Pyrus* sp. tree c. 15.5m in height located on the southern bank of the drainage ditch.

4.51 Of particular note is a mature English oak tree c. 12.5m in height (T56 on the arboriculture tree survey report), which is located along the north-western boundary of the scrub land parcel, adjacent to Tuddenham Road. This possible veteran or ancient tree has numerous features which may be used by roosting bats (as well as birds, invertebrates and other fauna). The tree is covered in dense ivy and therefore not all features could be inspected/identified at the time of the initial survey.

Fauna

Bats

4.52 A total of 35 bat records were identified within the search area, dating from 2003 to 2021. These include the following species: These include the following species: common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *P. pygmaeus*, serotine *Eptesicus serotinus*, noctule *Nyctalus noctule* and brown long-eared bat *Plecotus auritus*. A number of records were also recorded for '*Mytosis* bat species' *Myotis* spp., '*Nyctalus/Eptesicus*' *Nyctalus/Eptesicus* agg. and 'bat' *Chiroptera* spp. which could not be identified to species level.

4.53 The provided records are distributed evenly between the built and rural environments surrounding the Site, with the majority of records being from foraging or commuting bats. The closest record to the Site is of droppings of a large bat, possibly serotine, found in an outbuilding adjacent to the north-west corner of the Site in 2021. The closest record identified to species level is from 2018 and is of a foraging soprano pipistrelle located adjacent to the north-west corner of the Site. The closest record of a roost dates from 2021 and is of brown long-eared bats c. 0.3km north of the Site.

4.54 The arable habitats which dominate the Site provide some sub-optimal opportunities for foraging bats. However, the hedgerows (in particular those with associated mature trees), provide greater opportunities

including navigational features and foraging opportunities for bats. Additionally, the two on-site woodlands (W1 and W2) and scattered mature trees provide potential to support roosting bats with numerous potential roosting features noted.

[redacted] badger footprints, which suggest badgers navigate through the area.

4.56 [redacted]

[redacted]

Dormouse

4.58 A single record of dormouse *Muscardinus avellanarius* was identified within the search area c. 1.7km north-west of the Site from 2014. No further information was provided regarding this record.

4.59 In addition, dormouse have been confirmed present at the Henley Gate development site c. 2.3km west from the Site, with a single nest found in a hedgerow in September 2014. This record is spatially linked to the Site via a network of hedgerows and the railway line embankment habitats, which provide a dispersal corridor which connects to the northern Site boundary.

4.60 No evidence of dormouse was recorded on-site during the initial survey. However, the two woodland blocks and network of hedgerows

across the Site provide a range of foraging/nest building species, and some structure for nest building, refuge/hibernation and dispersal.

Riparian Mammals

4.61 A total of 13 records of water vole *Arvicola amphibius* were identified within the search area, dating from 2005 to 2019. All records provided are in association with the River Fynn, which lies c. 1.0km north-east of the Site at its closet point.

4.62 Of the ten records provided with an accurate enough grid reference to provide relevant information, the closest record dates from 2015 and is located c. 1.2km north-east from the Site. The most recent record along this stretch of river is from 2019 and is of footprints found along the riverbanks c. 1.9km north from the Site.

4.63 A total of 11 records of otter *Lutra lutra* were identified within the search area, dating from 2003 to 2019. The closest record is c. 0.7km north-east from the Site by Tuddenham bridge in 2003. A cluster of more recent records of footprints and spraints dating from 2018 to 2019 are located c. 1.9km north of the Site associated with the River Fynn.

4.64 The majority of the Site, being dominated by arable habitat is unsuitable for a resident water vole or otter populations and are very unlikely to serve as overland dispersal habitats. A small number of drainage ditches run on/adjacent to the Site. However, at the time of the survey these ditches were dry (although are likely to hold some water in the winter/after long periods of rainfall) and do not provide suitable aquatic/bankside vegetation required for foraging/shelter by water vole. The ditches could theoretically provide potential opportunities for transient water vole and otter populations. However, given the lack of connectivity to any major water courses, it is very unlikely that these ditches would be used by water vole or otter. Furthermore, the two woodland blocks on site are not of a size/structure (which dense scrub and woody understorey) to provide adequate resting/breeding opportunities for otter. Water vole and otter are therefore considered likely absent from the Site.

Other Mammals

Brown Hare

4.65 Nine records of brown hare *Lepus europaeus* were identified within the search area, dating from 2003 to 2019. The majority of these records are associated with open arable fields with the closest record being from 2013, located c. 0.7km north-east from the Site.

4.66 No evidence of brown hare was identified during the survey. However, the Site does provide some suitable foraging opportunities, with field margins, grassland, woodland edges, and hedgerows providing possible refuge and lay-up sites. Although on-site habitats are suitable

to support brown hare, similar habitat and areas of woodland are present throughout the wider landscape surrounding the Site which could also support this species. In addition, the Site is bordered by residential land to the south/south-west, which will deter brown hares and restrict their occupation of the land. As such, the Site is unlikely to support a notable population of brown hare, and no significant impacts on the conservation status of brown hare in the local area are anticipated.

Hedgehog

4.67 SBIS provided 604 records of hedgehog *Erinaceus europaeus* within the search area, dating from 2003 to 2022. The majority of records are found within the built environment of Ipswich to the south of the Site, with some records associated with open arable fields and woodland. Three records have been recorded on-site from 2013, 2014 and 2015. No further information was provided regarding these records.

4.68 No evidence of hedgehog was identified during the survey. On-site opportunities for hedgehog are provided by hedgerow, woodland and grassland habitats which provide shelter and foraging opportunities. Within the wider landscape, nearby residential gardens situated in Ipswich to the south of the Site provide further opportunities for this species. Residential gardens adjacent to the northern Site boundary provide further suitable foraging and hibernation opportunities for hedgehog.

4.69 Given the dominance of open habitat, the Site is unlikely to support a particularly notable/large population of hedgehog. As such, if present, they are likely limited to small numbers. Measures have been suggested to ensure any hedgehogs present locally can make use of new garden habitats created at the Site.

Harvest Mouse

4.70 No records of harvest mouse *Micromys minutus* were identified within the search area.

4.71 No evidence of harvest mouse was recorded during the survey. The arable land-use dominating the Site provides theoretical opportunities for this species. However, the fields are in regular crop rotation and the field margins of the Site are narrow and would not provide substantial breeding opportunities for this species. Areas of longer sward grassland are limited, providing minimal opportunities for this species. Therefore, based on current conditions, harvest mouse are considered likely absent from the Site and are not considered further within this report.

Birds

4.72 A total of 1,713 records of 107 bird species were identified within the search area, dating from 2004 to 2023. Those of potential relevance to

the Site include skylark *Alauda arvensis*, barn owl *Tyto alba*, bullfinch *Pyrrhula pyrrhula* and yellowhammer *Emberiza citronella*.

4.73 The Site provides foraging and nesting opportunities for a range of breeding birds associated with agricultural landscapes, with the boundary hedgerows, scrub and the on-site woodland also likely to support a number of common farmland and garden bird species. During the initial site visit collard dove *Streptopelia decaocto* and house sparrow *Passer domesticus* were recorded on-Site.

Reptiles

4.74 A total of 11 records of three reptile species were identified within the search area including common lizard *Zootoca vivipara*, grass snake *Natrix helvetica* and slow-worm *Anguis fragilis*. The closest record to the Site is from 2013 and is of a slow-worm reported by allotment holders c. 0.6km south of the Site.

4.75 No evidence of reptile was recorded during the Site visit (e.g. sloughed skins). The arable field margins, areas of grassland and scrub habitat on-site do provide some opportunities for reptiles to bask, hunt and seek refuge.

Amphibians

4.76 A total of 82 records of five amphibian species were identified within the search area, including great crested newt (GCN) *Triturus cristatus*, palmate newt *Lissotriton helveticus*, smooth newt *Lissotriton vulgaris*, common toad *Bufo bufo* and common frog *Rana temporaria*. The closest records are associated with a pond c. 0.6km west of the Site (near P12), where GCN eggs were identified in 2011 (indicating a breeding population). Two GCN Class Survey Licence Returns from 2017 are also associated with this area with both confirming the presence of GCN in September 2017. No evidence of amphibians were recorded during the survey and no ponds are present within the Site.

Great Crested Newt

4.77 Despite spending much of their annual lifecycle within the terrestrial environment, great crested newts are dependent upon the presence of suitable aquatic breeding habitat in order for a population to persist. A total of 18 potential breeding ponds were identified within a dispersible range of the Site, based on OS mapping.

4.78 The majority of the Site, being dominated by intensively managed arable habitat provides suboptimal opportunities for amphibians during their terrestrial phase. However, hedgerows, woodland and scrub could provide potential foraging, refugia (including hibernation opportunities) and dispersal routes for GCN which may be present within ponds within a dispersal range of the Site. The railway adjacent

to the north of the Site also provides a dispersal corridor and connectivity to ponds within the wider landscape.

Invertebrates

4.79 A total of 1,061 records of 106 invertebrate species were identified within the search area. Those of potential relevance to the Site include buff ermine *Spilosoma lutea*, wall *Lasiommata megera* and stag beetle *Lucanus cervus*. One record for a stag beetle was provided adjacent to the Site, dating from 2021. The Site is not located within an Important Invertebrate Area (IIA).

4.80 It is anticipated that the combination of arable field, hedgerow and woodland habitats will support a range of common and widespread invertebrate species. However, there is no indication that the Site would support a notable or large assemblage, with any arable pesticide use likely to reduce invertebrate interest further. As such, the likely assemblage of invertebrates present at the Site is not likely to be of substantive ecological importance.

5.0 DISCUSSION AND RECOMMENDATIONS

5.1 Likely effects in respect to development are broadly set out below, including recommendations for further investigations/surveys which are required, and opportunities for ecological enhancements.

Nature Conservation Designations

Statutory

Deben Estuary RAMSAR and SPA, Stour and Orwell Estuaries RAMSAR and SPA & Sandlings SPA

5.2 The Deben Estuary RAMSAR and SPA & Stour and Orwell Estuaries RAMSAR and SPA are located c. 4.8km south and c. 6.7km east of the Site, respectively. These sites are designated for supporting internationally and nationally important populations of fauna and flora.

5.3 The Site Improvement Plan for Deben Estuary SPA notes public access/disturbance as a 'pressure/threat' and recommends that recreational use should be investigated, with the aim to minimise the impact of disturbance to the estuary. The Site Improvement Plan for Stour and Orwell Estuaries SPA also notes public access/disturbance as a 'pressure/threat' and recommends that a cross-sector disturbance management plan should be co-ordinated.

5.4 The Sandlings SPA is located c. 11.0km east of the Site, with the Site falling within the Zone of Influence of this designation. The Site Improvement Plan for this designation notes public access/disturbance as a pressure upon nightjar and woodlark, and recommends that the impacts of recreational pressure, particularly by dogs off leads, is determined for this designation.

5.5 A document should be prepared to assist the competent authorities in their consideration of the Habitats Regulations Assessment and fully assess the impact of the proposed scheme upon these designations.

Sinks Valley SSSI

5.6 Sinks Valley SSSI is located c. 2.9km east of the Site. It supports a range of aquatic habitats including open water, fringing swamps, spring-fed fen, wet grassland, and wet alder woodland, with the majority of the on-site habitats assessed to be in an unfavourable and declining condition due to lack of appropriate management.

5.7 The southern land parcel of the Site lies within the SSSI impact risk zone, with planning applications of residential developments of 50 dwellings or more identified as having likely impacts on this designation. However, this designation does not appear to be publicly accessible and therefore this Site will not be sensitive to possible increases in recreational pressure as a result of the proposed development.

Local Nature Reserves (LNRs) – 3 No.

5.8 Sandlings LNR, Mill Stream LNR and The Dale Open Space LNR are all located between c. 2.1-2.6km from the Site and are open to the public for recreational use.

5.9 Given that these LNRs are likely to be already subject to some level of recreational pressure, in addition to the distance/lack of habitat connectivity between the designations and the Site, and the lack of similar/supporting habitats found on the Site, no direct or indirect impacts on these designations are predicted.

Non-Statutory

Local Wildlife Sites (LWSs) – 5 No.

5.10 A total of five Local Wildlife Sites are located within 2km of the Site. The closest of these is Pumping Station Meadow LWS, located c. 0.5km north-east. The remaining four designations are all located between c. 1.2-2km from the Site.

5.11 There is no public access within the Pumping Station Meadow LWS and Welhams Meadow and Copse LWS, however, public footpaths do run through Playford Alder Carr LWS, Christchurch Park LWS and Rushmere Heath LWSs and so these designations are likely to already to subject to some level of recreational pressure.

5.12 Given that the designations which are publicly accessible are all 1.2km or more away from the Site and do not support similar habitats to those found on-site, no direct or indirect adverse impacts on these designations are anticipated as a result of the proposed development.

Habitats and Flora

5.13 Emerging legislation and existing policy supports the provision of Biodiversity Net Gain (BNG) through development. The NPPF states that planning decisions should provide net gains for biodiversity, and central government have legislated a requirement for at least 10% net gain in relation to all planning permissions, expected to take effect in early 2024. Applying the Biodiversity Metric to quantify BNG in association with development is already supported in current Planning Practice Guidance.

5.14 While much of the Site is dominated by habitats of limited ecological interest, areas of greater biodiversity value have been identified. Should scheme design not retain and protect these features and make adequate provision for measurable enhancements, it may be necessary to seek opportunities for off-site habitat creation or restoration to ensure delivery of an overall BNG.

5.15 It is recommended that the scheme design be informed by the application of the Statutory Biodiversity Metric, to provide a quantitative assessment of losses or gains in biodiversity.

Mixed Scrub (h3h)

5.16 A separate area of scrub is present to the west of the Site comprising some habitat interest and potential to support a number of protected or notable species. Should any development be proposed in this location consideration of these interests should be given and relevant mitigation and compensation set out.

Other Woodland – Broadleaved (w1g)

5.17 The two woodland blocks (W1 and W2) along the north-eastern Site boundary are likely to qualify as habitats or principle important under Section 41 of the NERC act (2006). These habitats are likely to provide foraging and sheltering opportunities for a range of fauna. These woodlands should be retained as part of the proposals and protected and buffered from the development. See below 'Hedgerows and Trees' for recommended protection measures.

5.18 Opportunities are available to enhance these woodlands through the thinning of the canopy layer to allow a denser, more structurally diverse and extensive woody understorey and ground flora to establish.

Other Neutral Grassland (g3c)

5.19 The other neutral grassland in the south of the Site supports a range of flora species and should be retained and/or enhanced as part of open space provision as far as possible to maintain, and increase, ecological interests of the Site.

Hedgerows (h2a) and Trees

5.20 All of the on-site hedgerows qualify as habitats of principle important under S41 of the NERC Act (2006) and represent important foraging, refuge and dispersal habitat for a range of fauna. These hedgerows should be retained wherever possible. All mature and veteran trees on-site will also be retained as part of the proposals.

5.21 Retained hedgerows and trees will be vulnerable to damage during the construction phase from passing construction traffic and ground compaction, therefore the implementation of standard arboriculture protection measures in accordance with BS5837:2012 will ensure on-site and adjacent off-site hedgerows and trees will be safeguarded during construction work.

5.22 Opportunities are available to enhance existing hedgerows with supplementary planting to reinforce their function as wildlife corridors,

and habitats of interest in their own right, as well as planting trees along all proposed spine roads.

Fauna

Bats

5.23 On-site woodlands, hedgerows and trees provide good foraging, commuting and roosting opportunities for bats.

5.24 To ensure functionality is retained, retention and buffering of these habitats is recommended as far as is practicable, thereby improving their functionality as a potential foraging resources/navigational features for use by bats. In this respect, any proposed lighting scheme for the Site should be designed sensitively to avoid the illumination of retained and proposed hedgerows/habitats.

Badger

5.25 [redacted]

[redacted]

Dormouse

5.27 Habitats within the Site include woodland and hedgerows, which provide some suitable habitat for dormice. Additionally, dormice are known to be present within the local area, with records provided connected the Site via a network of hedgerows and the railway line.

5.28 It is recommended that a full dormouse nest tube survey be undertaken at the Site to to establish the presence/likely absence of dormouse at the Site.

Other Mammals

5.29 Hedgehogs and other mammals may make use of the Site for foraging and migration. During the construction phase there is a risk of these species falling into and becoming trapped within open excavations. The above measures recommended to safeguard badgers will also mitigate these risks. In addition, pipework (over 150mm diameter) must be capped off or blocked if they are to be left overnight.

Birds

5.30 All wild birds are protected from killing and injury, and their nests and eggs are protected from damage and destruction, under the Wildlife and Countryside Act 1981 (as amended). Therefore, any clearance of nesting habitat or features required to facilitate the development should avoid the period between March and August (inclusive) when nesting birds are most likely to be present. If this is not possible, habitat will need to be checked for nesting birds by a suitably qualified ecologist prior to clearance with works only proceeding if no nesting evidence or behaviour are observed.

5.31 The Site has the potential to be used by a range of farmland birds during the breeding season. The on-site woodland, scrub, hedgerows and trees are limited in size/area but provide additional habitats for a range of common garden and woodland bird species. Whilst the Site is not anticipated to provide substantive breeding opportunities for farmland birds (given the unfavourable arable rotation), breeding bird surveys will be undertaken determine the importance of the Site for local bird populations.

5.32 To minimise the loss of bird nesting habitat on-site, existing boundary habitats including hedgerows and trees, along with the on-site woodland and scrub, should be retained and buffered from the development wherever possible.

5.33 New landscaping, open space, gardens and drainage features have the potential to deliver a range of long-term opportunities for local bird populations.

Reptiles

5.34 All British reptile species are listed within Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are afforded protection against killing and injury under parts of sub-section 9(1) of the Act. In addition, all British reptile species are species of principal important under S41 of the NERC Act (2006) in England.

5.35 Suitable reptile habitat is present on-site, including opportunities for hibernation. Given the legal protection afforded to reptiles, reptile surveys are recommended to identify any resident populations and to determine the scope of any mitigation or enhancement measures which are necessary.

Great Crested Newt

5.36 Terrestrial habitats within the Site suitable for great crested newts are limited. However, there is some potential for the Site to support dispersal, refuge and foraging by great crested newts. While no ponds are present within the Site, GCN records have been provided within a dispersible range of the Site.

5.37 It is recommended that a Habitat Suitability Index (HSI) assessment of all ponds within a dispersible range of the Site be undertaken to determine their suitability to support great crested newt breeding. If suitable, further surveys (such as eDNA sampling) would be recommended to determine presence/likely absence of great crested newts.

Summary of Recommendations

5.38 Based on the ecological constraints identified above, Table 2 summarises recommendations for further work necessary to determine the need for, and scope of, any avoidance, mitigation and/or compensation measures to address potential adverse effects of development. The outcome of this further work will inform an EcIA of the final scheme.

Table 2. Recommendations for further investigation/survey

Ecological Feature	Further Work	Applicable Timescales
Deben Estuary RAMSAR	Document to be prepared to assist competent authorities in their consideration of the Habitats Regulations Assessment and fully assess the impact of the proposed scheme upon these designations	N/A
Deben Estuary SPA		
Stour and Orwell Estuaries RAMSAR		
Stour and Orwell Estuaries SPA		
Sandlings SPA		
Habitats (grassland, woodland, scrub, hedgerows)	Habitat condition assessments (including hedgerows) to inform Biodiversity Metric Calculations	April - October
Bats	Preliminary ground-based roost assessment of on-site trees	Anytime (optimal Dec - Mar)
	Seasonal periods of automated static monitoring	Spring, summer and autumn
Badger	Badger survey	Anytime (optimal Feb – Apr or Sept – Oct)
Dormouse	Nest tube surveys	Monthly, April - November
Breeding Birds	Breeding bird surveys	Four survey visits between March – early July
Wintering Birds	Wintering bird surveys	Two survey visits between November and February
Reptiles	Reptile surveys	March - October
Great Crested Newt	Pond scoping and Habitat Suitability Index (HSI) Assessment	Anytime
	eDNA sampling	March – October (sample collection optimal between 15 April and 30 June)

Opportunities for Ecological Enhancement

5.39 To promote adherence to the NPPF and Ipswich and Suffolk Coastal local plans policies the following opportunities for ecological enhancement have been identified:

- Aquatic habitat creation to increase biodiversity
- Incorporation of native plants and those of wildlife importance in to landscaping scheme to provide foraging opportunities for birds, invertebrates and bats
- Improved connectivity of green infrastructure with new hedgerow planting and infill planting
- Provision of new bat roosting and bird nesting opportunities within new buildings
- Provision of log piles/hibernacula to benefit reptiles, small mammals and invertebrates
- Provision of hedgehog gaps in new fencing to promote habitat connectivity across and within the Site

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Appendix A

Habitats Plan

N

- Site boundary
- Arable and horticulture (c1)
- Modified grassland (g4)
- Mixed scrub (h3h)
- Other woodland-broadleaved (w1g)
- Other neutral grassland (g3c)
- Hedgerows (Priority Habitat) (h2a)
- Mature Trees
- Fn Field reference

0 100 200 m

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Project	Land East of Humber Doucy Lane, Ipswich	Date	February 2024	Drawing No.	CSA/6675/111
Drawing Title	Habitats Plan	Scale	Refer to scale	Rev	-
Client	Barratt David Wilson & Hopkins Homes	Drawn	LF/MD	Checked	CH

Appendix B

Legislation and Planning Policy

1.1. The **Conservation of Habitats and Species Regulations 2017** (as amended) make prescriptions for the designation and protection of Sites of Community Importance ('European sites', i.e. Special Areas of Conservation and Special Protection Areas) and European Protected Species (EPS). The latter include all native bats, great crested newts, dormice, otters and certain reptiles, listed under Annex II of the Regulations. Following the UK's departure from the European Union, the provisions of the Regulations have been retained through enactment of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, which came into force on 31 December 2020.

1.2. The **Wildlife and Countryside Act 1981** (as amended, principally by the Countryside and Rights of Way Act 2000) forms the basis for protection of statutory designated sites of national importance (e.g. Sites of Special Scientific Interest; SSSIs) and native species that are rare and vulnerable in a national context. Additionally, badgers are protected under the **Protection of Badgers Act 1992**.

1.3. The **Environment Act 2021** received Royal Assent in November 2021. Through an amendment to the Town and Country Planning Act 1990 the Environment Act will introduce a mandatory requirement for all planning permissions to be conditional upon the submission of a Biodiversity Gain Plan for approval by the Local Planning Authority. The Plan will need to demonstrate a net gain of at least 10% in the biodiversity value of the development site. These provisions are not yet in force, pending their enactment through secondary legislation.

1.4. Section 40(1) of the **Natural Environment and Rural Communities (NERC) Act 2006** states that each public authority, "must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity." This legislation makes it clear that planning authorities should consider impacts to biodiversity when determining planning applications, with particular regard to the Section 41 (S41) lists of 56 habitats and 943 species of principal importance. The UK Biodiversity Action Plan (BAP) has been superseded by the Biodiversity 2020 Strategy, however Local BAPs continue to influence biodiversity management and conservation effort, including through the spatial planning system, at the local scale.

1.5. The **National Planning Policy Framework (2023)** (NPPF) sets out government planning policies for England and how they should be applied. With regards to ecology and biodiversity, Chapter 15: Conserving and Enhancing the Natural Environment, paragraph 174, states that the planning system and planning policies should minimise impacts on and provide net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

1.6. Paragraph 180 sets out the principles that local planning authorities should apply when determining planning applications:

- If significant harm to biodiversity resulting from a development cannot be avoided (through locating 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.
- 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.

1.7. Accompanying the NPPF, central government guidance on the implementation of planning policies is set out within online Planning Policy Guidance (PPG). The Natural Environment PPG addresses principles across a broad spectrum of topics targeting biodiversity conservation, from individual site and species protection through to the supporting of ecosystem services, and the use of local ecological networks to support the national Nature Recovery Network. In particular, the PPG promotes the delivery of measurable Biodiversity Net Gain through the creation and enhancement of habitats alongside development.

1.8. The **Government Circular 06/2005**, which is referred to within the NPPF, defines statutory nature conservation sites and protected species as a material consideration in the planning process.

1.9. Local planning policies of relevance to ecology, biodiversity and/or nature conservation have been set out in Table 1 below.

Table 1. Summary of regional and local planning policy relating to ecology

Policy	Summary
Ipswich Local Plan 2018-2036	
Policy ISPA3: Cross-boundary	"The Council will continue to work with other authorities to address the requirements of the Recreational Disturbance

Policy	Summary
mitigation of effects on Protected Habitats and Species	Avoidance and Mitigation Strategy and implementation of mitigation measures for the benefit of the European protected sites across the Ipswich Strategic Planning Area. The Council will continue to work with other authorities over the plan period to ensure that the strategy and mitigation measures are kept under review in partnership with Natural England and other stakeholders."
Policy ISPA4: Cross Boundary Working to Deliver Sites	"Ipswich Borough Council will work with neighbouring authorities to master plan and deliver appropriate residential development and associated infrastructure on identified sites within the Borough but adjacent to the boundary where cross boundary work is needed to bring forward development in a coordinated and comprehensive manner. 23.28ha of land at the northern end of Humber Doucy Lane, identified on the Policies Map as ISPA4.1, is allocated for 449 dwellings and associated infrastructure to come forward in conjunction with land allocated in Policy SCLP12.24 of the Suffolk Coastal Local Plan in East Suffolk as a cross boundary site. 60% of the site within Ipswich Borough is allocated for housing and 40% is allocated for secondary uses, comprising open space and other green and community infrastructure. Development will be planned and comprehensively delivered through master planning of the site, including the allocation of land in East Suffolk, to be undertaken jointly with East Suffolk Council and the landowner. Development will be expected to comply with the following criteria: a) Delivery of a high-quality design in compliance with Policy DM12, including at least 30% affordable housing (unless viability assessment shows otherwise) in accordance with Policies CS8 and CS12. The mix and tenure types of housing will be determined through the master planning process; b) Development must respect the maintenance of separation between Ipswich and surrounding settlements which is important to the character of the area. This should be achieved by the effective use of green infrastructure to create a transition between the new development/Ipswich urban edge and the more rural landscape character of East Suffolk; c) The settings of the grade II Listed Westerfield House Hotel, Allens House, Laceys Farmhouse, and the Garden Store north of Villa Farmhouse must be preserved or enhanced as part of any future development of the site. Development must also have regard to its impact on the significance of non-designated heritage assets identified in the 44 Heritage Impact Assessment (HIA) (September 2020). An archaeological assessment is also required. Any future planning applications will require an HIA demonstrating how the effects on heritage assets are taken into account and mitigated; d) A site specific Flood Risk Assessment will be required; e) Rows of trees covered by Tree Preservation Orders (TPOs) along the boundary with Westerfield House should be preserved unless there are overriding reasons for their removal; f) Current infrastructure requirements are as follows (subject to any additional infrastructure that may be identified as part of the planning application process):

Policy	Summary
	i. Primary school places and an early years setting to meet the need created by the development; ii. Replacement sports facilities if required to comply with policy DM5, other open space in compliance with the Council's Open Space Standards set out in Appendix 3 of the Core Strategy DPD and links to the Ipswich 'green trail' walking and cycling route around the edge of Ipswich; iii. A project level Habitat Regulations Assessment will be required and Suitable Alternative Natural Greenspace (SANGs); iv. Landscaping and development proposals must take account of the Ipswich Wildlife Audit (2019) recommendations for the site, contribute positively to the enhancement of strategic green infrastructure both on and off the site in its vicinity as appropriate, include a 10% biodiversity net gain, and provide a soft edge to the urban area where it meets the countryside; v. Transport measures including: • highway and junction improvements on Humber Doucy Lane and Tuddenham Road; • walking and cycling infrastructure to link the site to key social and economic destinations including the town centre, and local services and facilities; • public transport enhancements; and • appropriate transport mitigation measures that arise from demand created by the development, in line with the ISPA Transport Mitigation Strategy; vi. Development will need to be phased and delivered in coordination with the delivery of the Ipswich Garden Suburb to ensure sufficient primary school capacity is provided to meet demand generated from the strategic allocation at the northern end of Humber Doucy Lane; vii. The development will be triggered by the ability to provide the necessary primary school capacity on the Red House element of Ipswich Garden Suburb or an agreement between the landowner and Suffolk County Council, as the Education Authority, to provide a primary school on the Humber Doucy Lane development; viii. As part of the master planning work, the opportunity for the provision of convenience retail on site should be assessed in order to reduce travel demand, taking into account any effects on the viability of existing local retail facilities; and ix. A financial contribution to off-site healthcare facilities"
Policy CS4: Protecting our assets	"The Council is committed to conserving and enhancing the Borough's built, heritage, natural and geological assets. The Council will conserve, and promote the enjoyment of, the historic environment. To this end, it will: i. conserve and enhance the character and appearance of conservation areas, by preparing and reviewing where necessary character appraisals and using them to guide decisions about development; ii. review the extent of conservation areas and designate any new areas or amend boundaries as appropriate; iii. conserve and enhance heritage assets within the Borough through the development management policies in this plan, the use of planning obligations to secure the enhancement and

Policy	Summary
	promotion of the significance of any heritage asset, the maintenance of a list of heritage assets of local importance, such as buildings or parks, and taking steps to reduce the number of heritage assets at risk; iv. Promote local distinctiveness and heritage assets through the publication and review of Supplementary Planning Documents (SPDs) including the Ipswich Urban Character SPD and the Development and Archaeology SPD; and v. Recognise the wider role heritage can play in regeneration, as a cultural, educational, economic and social resource. The Council will also seek to protect and enhance local biodiversity, trees and soils in accordance with the National Planning Policy Framework and national legislation by: a) Applying full protection to international, national and local designated sites and protected and priority species; b) Requiring new development to incorporate provision for protecting and enhancing geodiversity interest and provide biodiversity net gain that is proportion to the scale and nature of the proposal. Reference should be made to the information and recommendations of the Wildlife Audit in relation to any proposals on, or that may affect, sites identified within it; c) Avoiding the loss of ancient woodland and ancient or veteran trees in accordance with national policy, and requiring new development to plant the veteran trees of the future using appropriate native species of local provenance; d) Supporting and securely funding the Greenways Project; e) Designating additional Local Nature Reserves where appropriate; f) Preparing and implementing management plans for Council owned wildlife sites; g) Identifying, protecting and enhancing an ecological network across Ipswich linking into adjacent areas, in accordance with Policy DM8, maximising the benefits to the local ecosystem and providing biodiversity net gains beyond the level anticipated through the scale of development proposed; h) Conserving and enhancing the natural beauty and special qualities of the Suffolk Coast and Heaths Area of Outstanding Natural Beauty and requiring development to respond to local landscape sensitivity; i) Preventing the spread of non-native invasive species by ensuring that an appropriate biosecurity proposal is adopted; and j) Protecting and enhancing valued soils. The Council will encourage the use of local reclaimed, renewable, recycled and low environmental impact materials in construction, in order to conserve finite natural resources and minimise environmental impacts. New development will also be required to minimise the amount of waste generated during construction and through the lifetime of the building."
Policy CS16: Green infrastructure, sport and recreation	"The Council will safeguard, protect and enhance biodiversity and the environment by working in partnership with others to ensure that our parks and open spaces are well-designed, well managed, safe and freely accessible, encouraging use and benefitting the whole community. The Council will enhance and

Policy	Summary
	extend the ecological network and green corridors, blue corridors, open spaces and sport and recreation facilities for the benefit of biodiversity, people and the management of local flood risk. It will do this by: a) requiring all developments to contribute to the provision of open space necessary for that development in accordance with Policy DM6; b) requiring major new developments to include usable on-site public open spaces and wildlife habitat. On-site provision must create a network or corridor with existing green infrastructure where such an ecological network or green corridor exists beyond the site boundaries; c) supporting proposals or activities that protect, enhance or extend open spaces and sport and recreation facilities, including water and river-based activities; d) working with partners to prepare, implement and monitor the Recreational Disturbance Avoidance and Mitigation Strategy and other strategies and management plans for green spaces, including an Orwell Country Park management plan, that will result in a reduced impact upon birds in the Orwell Estuary; e) supporting the Greenways Project in working with communities and volunteers to manage green corridors in Ipswich; f) support the enhancement of canopy cover and ecological networks; g) working with partners to improve green infrastructure provision and link radial ecological networks and green corridors with a publicly accessible green trail around Ipswich; h) working with strategic partners and developers to ensure the provision of a new country park and visitor centre within the Ipswich Garden Suburb, and an extension to Orwell Country Park; i) promoting improved access to existing facilities where appropriate; j) reviewing the Town's estate of sports facilities to consider how they can best meet the needs of a growing population; and k) working with local police and community partners to ensure that appropriate opportunities to design out crime have been taken prior to the commencement of any project and as part of the on-going management of any open spaces, sport or recreational facilities. Policies in this plan and the Site Allocations and Policies (incorporating IP-One Area Action Plan) Development Plan Document Review identify existing, new and proposed open spaces, sport and recreation facilities, green corridors and networks and allocate sites for new open spaces and facilities."
POLICY DM8: The Natural Environment	"All development must incorporate measures to provide net gains for biodiversity. Proposals which would result in significant harm or net loss to biodiversity, having appropriate regard to the 'mitigation hierarchy', will not normally be permitted. Sites of International and National Importance Proposals which would have an adverse impact on European protected sites will not be permitted, either alone or in

Policy	Summary
	combination with other proposals, unless imperative reasons of overriding public interest exist in accordance with the provisions of the European Habitats Directive. Sites of Special Scientific Interest (SSSI) will be protected from development, which directly or indirectly would have an adverse effect on their natural value. An exception will only be made where a proposed development: a) could not be located on an alternative site that would cause less harm; b) would deliver benefits that clearly outweigh the impacts on the site's special interest and on the national network of such sites; and c) would compensate for the loss of natural capital. Any development with the potential to impact on a Special Protection Area, or Special Area for Conservation or Ramsar site within the Borough will need to be supported by information to inform a Habitats Regulations Assessment, in accordance with the Conservation of Habitats and Species Regulations 2017, as amended (or subsequent revisions). Financial contributions will be secured in relation to the avoidance and mitigation of impacts of increased recreation, to contribute towards the provision of strategic mitigation as established through the Recreational Disturbance Avoidance and Mitigation Strategy. Where mitigation is proposed to be provided through alternative mechanisms, applicants will need to provide evidence to demonstrate that all impacts are mitigated, including incombination effects. Depending on the size and location of the development, additional measures such as Suitable Alternative Natural Greenspaces (SANGS) may be required as part of development proposals. Local Nature Reserves and County Wildlife Sites Planning permission will not be granted for development that would result in damage or loss in extent or otherwise have a significant adverse effect on: locally designated County Wildlife Sites and geological sites; Local Nature Reserves; or Local Wildlife Sites, if the harm cannot be avoided, adequately mitigated, or, as a last resort, compensated for. Enhancements for protected sites will be required from new development. Priority Habitats and Species: Development which could harm, directly or indirectly, species, which are legally protected, or species and habitats that have been identified as Species or Habitats of Principal Importance in England (also known as Section 41 or 'Priority' species and habitats) will not be permitted unless the harm can be avoided or mitigated by appropriate measures. Development must include enhancements for protected and priority species as part of their design and implementation. Enhancing Ecological Networks :

Policy	Summary
	The Council will enhance the ecological network across the Borough as identified on Plan 5. The designated sites are ranked 1 and 2 High Conservation Value. Within the remaining core areas of the ecological network and the corridors which link them, development proposals will be required to have regard to existing habitat features and the wildlife corridor function, through their design and layout, and achieve net biodiversity gains commensurate with the scale of the proposal, through measures such as retaining existing habitat features, habitat restoration or re-creation and comprehensive landscaping, which is appropriate to local wildlife. Development which that would fragment the corridor function will not be permitted unless there is adequate mitigation. Within the buffer zones around core areas and corridors, development will be required to enhance the ecological network, through measures such as wildlife beneficial landscaping."
POLICY DM9: Protection of Trees and Hedgerows	"The Council will protect existing trees and seek to secure additional trees that increase canopy cover in the interests of amenity and biodiversity by: a) making Tree Preservation Orders; b) only granting consent for felling, topping, lopping or uprooting if a sound arboricultural reason is provided to accompany applications; c) adhering to the principles of BS3998 'Tree work – Recommendations' 2010 for established tree management options (including soil care and tree felling); d) refusing planning permission for development resulting in the loss or deterioration of trees or vegetation of amenity, historic, cultural or ecological value unless the need for, and benefits of, the development in that location clearly outweigh the loss; and e) encouraging tree planting to achieve a target of 22% canopy cover or better by 2050. Planning permission for development resulting in the loss or deterioration of ancient woodland and ancient or veteran trees (irreplaceable habitats) will be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists. Applications for development should retain existing trees and hedgerows of amenity or biodiversity value where possible. Where development affecting trees or hedgerows is proposed, the application must be accompanied by: f) an accurate survey and assessment of all existing trees and hedgerows on site in accordance with BS5837 'Trees in relation to design, demolition and construction – Recommendations)' 2014 by a competent arboriculturist; g) details of protective measures to be put in place during the development process to ensure the health and safety of each specimen and hedgerow to be retained; and h) where removal of a mature or semi-mature tree or hedgerow is proposed, a plan for replacement planting on a two for one basis or better and using semi-mature specimens, unless

Policy	Summary
	otherwise agreed by the Council. Design in new development should have proper regard to the setting of protected trees. Landscaping and tree planting should be integrated into new development, including carparking areas. Where appropriate, new tree planting will be encouraged within landscaping schemes to increase the Borough's tree canopy cover. Soft landscaping shall include plants which encourage biodiversity, such as nectar rich plants."
Suffolk Coastal Local Plan (adopted 2020)	
Policy SCLP10.1: Biodiversity and Geodiversity	Development will be supported where it can be demonstrated that it maintains, restores or enhances the existing green infrastructure network and positively contributes towards biodiversity and/or geodiversity through the creation of new habitats and green infrastructure and improvement to linkages between habitats, such as wildlife corridors and habitat 'stepping stones'. All development should follow a hierarchy of seeking firstly to avoid impacts, mitigate for impacts so as to make them insignificant for biodiversity, or as a last resort compensate for losses that cannot be avoided or mitigated for. Adherence to the hierarchy should be demonstrated. Proposals that will have a direct or indirect adverse impact (alone or in-combination with other plans or projects) on locally designated sites of biodiversity or geodiversity importance, including County Wildlife Sites, priority habitats and species, will not be supported unless it can be demonstrated with comprehensive evidence that the benefits of the proposal, in its particular location, outweighs the biodiversity loss. New development should provide environmental net gains in terms of both green infrastructure and biodiversity. Proposals should demonstrate how the development would contribute towards new green infrastructure opportunities or enhance the existing green infrastructure network as part of the development. New development must also secure ecological enhancements as part of its design and implementation, and should provide a biodiversity net gain that is proportionate to the scale and nature of the proposal. Where compensatory habitat is created, it should be of equal or greater size and ecological value than the area lost as a result of the development, be well located to positively contribute towards the green infrastructure network, and biodiversity and/or geodiversity and be supported with a management plan. Where there is reason to suspect the presence of protected UK or Suffolk Priority species or habitat, applications should be supported by an ecological survey and assessment of appropriate scope undertaken by a suitably qualified person. If present, the proposal must follow the mitigation hierarchy in order to be considered favourably. Any proposal that adversely affects a European site, or causes significant harm to a Site of Special Scientific Interest, will not normally be granted

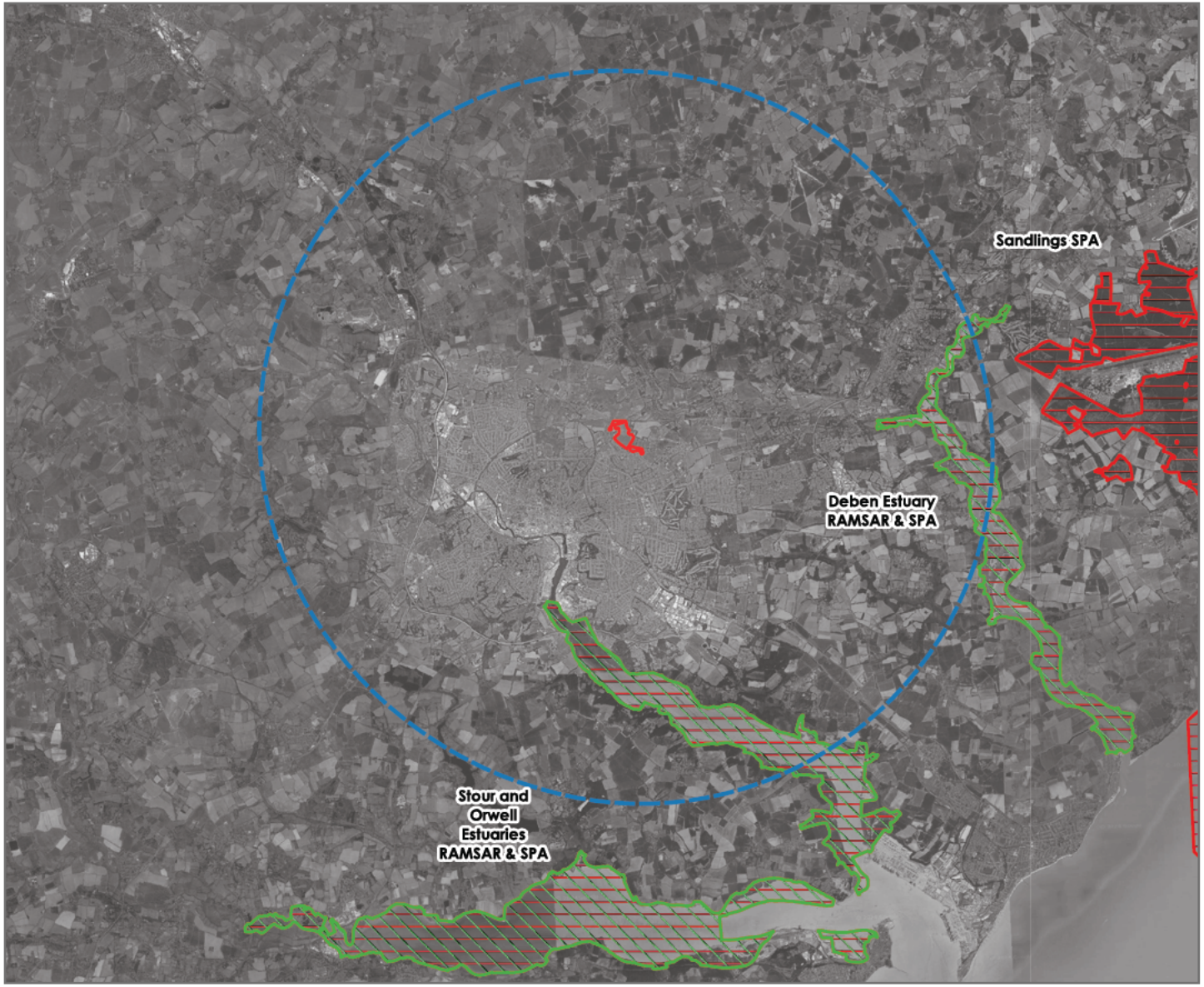
Policy	Summary
	permission. Any development with the potential to impact on a Special Protection Area, Special Area for Conservation or Ramsar site within or outside of the plan area will need to be supported by information to inform a Habitat Regulations Assessment, in accordance with the Conservation of Habitats and Species Regulations 2017, as amended (or subsequent revisions). The Recreational disturbance Avoidance and Mitigation Strategy has been prepared to provide a mechanism through which impacts from increased recreation can be avoided and mitigated via financial contributions towards the provision of strategic mitigation. Where mitigation is proposed to be provided through alternative mechanisms, applicants will need to provide evidence to demonstrate that all impacts are mitigated for, including in-combination effects. Depending on the size and location of the development, additional measures such as Suitable Alternative Natural Green Spaces (SANGS) may be required as part of development proposals. A Supplementary Planning Document will be prepared to assist with the implementation of the Recreational disturbance Avoidance and Mitigation Strategy. The Council will work with neighbouring authorities and Natural England to implement this strategy.
Policy SCLP10.2: Visitor Management of European Sites	The Council has a duty to ensure that development proposals will not result in an increase in activity likely to have a significant effect upon sites designated as being of international importance for their nature conservation interest. Applications for new car parking provision (public or privately owned which are available for wider public use) located within 1km boundary of a designated site or new access points direct into the estuary such as slipways or jetties will need to demonstrate that they will not result in an increase in activity likely to have a significant effect upon a European site whether on their own, or in combination with other uses. Such proposals need to be subject to a project level Habitats Regulation Assessment.
Policy SCLP10.3: Environmental Quality	Development proposals will be expected to protect the quality of the environment and to minimise and, where possible, reduce all forms of pollution and contamination. Development proposals will be considered in relation to impacts on; a) Air quality, and the impact on receptors in Air Quality Management Areas; b) Soils and the loss of agricultural land; c) Land contamination and its effects on sensitive land uses; d) Water quality and the achievement of Water Framework Directive objectives; e) Light pollution; and f) Noise pollution. Proposals should seek to secure improvements in relation to the above where possible.

Policy	Summary
	The cumulative effect of development, in this regard, will be considered.
Policy SCLP10.4: Landscape Character	Proposals for development should be informed by, and sympathetic to, the special qualities and features as described in the Suffolk Coastal Landscape Character Assessment (2018), the Settlement Sensitivity Assessment (2018), or successor and updated landscape evidence. Development proposals will be expected to demonstrate their location, scale, form, design and materials will protect and enhance: a) The special qualities and features of the area; b) The visual relationship and environment around settlements and their landscape settings; c) Distinctive landscape elements including but not limited to watercourses, commons, woodland trees, hedgerows and field boundaries, and their function as ecological corridors; d) Visually sensitive skylines, seascapes, river valleys and significant views towards key landscapes and cultural features; and e) The growing network of green infrastructure supporting health, wellbeing and social interaction. Development will not be permitted where it will have a significant adverse impact on rural river valleys, historic park and gardens, coastal, estuary, heathland and other very sensitive landscapes. Proposals for development will be required to secure the preservation and appropriate restoration or enhancement of natural, historic or man-made features across the plan area as identified in the Landscape Character Assessment, Settlement Sensitivity Assessment and successor landscape evidence. Development will not be permitted where it would have a significant adverse impact on the natural beauty and special qualities of the Suffolk Coast and Heaths Area of Outstanding Natural Beauty, that cannot be adequately mitigated. Development within the Area of Outstanding Natural Beauty, or within its setting, will be informed by landscape and visual impact assessment to assess and identify potential impacts and to identify suitable measures to avoid or mitigate these impacts. Planning permission for major development in the Area of Outstanding Natural Beauty will be refused other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest, subject to the considerations set out in the National Planning Policy Framework. Proposals should include measures that enable a scheme to be well integrated into the landscape and enhance connectivity to the surrounding green infrastructure and Public Rights of Way network. Development proposals which have the potential to impact upon the Area of Outstanding Natural Beauty or other sensitive landscapes should be informed by landscape appraisal, landscape and visual impact assessment and landscape mitigation.

Policy	Summary
	Proposals for development should protect and enhance the tranquillity and dark skies across the plan area. Exterior lighting in development should be appropriate and sensitive to protecting the intrinsic darkness of rural and tranquil estuary, heathland and river valley landscape character. Neighbourhood Plans may include local policies related to protecting and enhancing landscape character and protecting and enhancing tranquillity and dark skies.

Appendix C

Desk Study Information



N

Site boundary

10km buffer

RAMSAR

Special Protection Areas (SPA)

0 5 10 km

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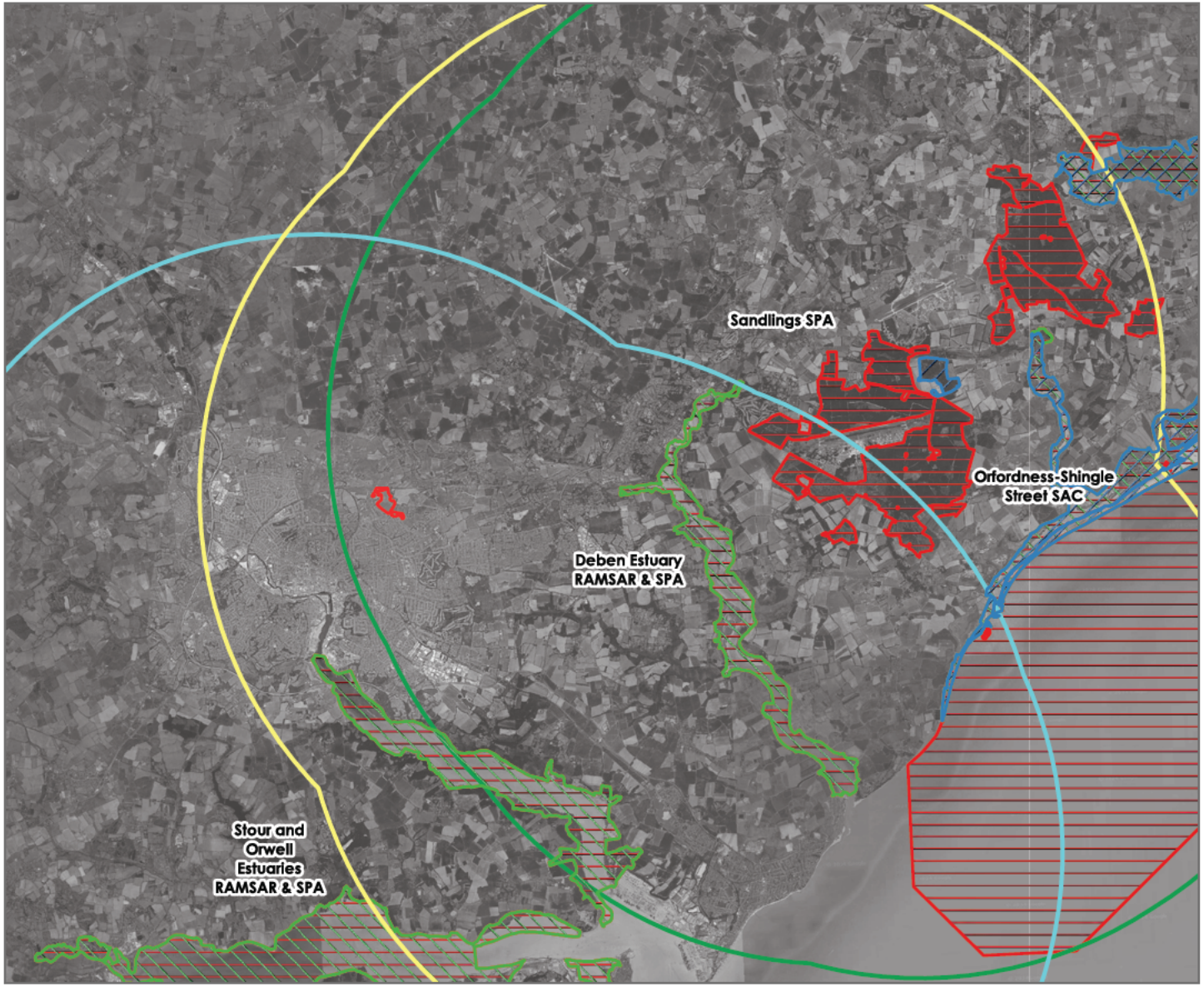
Project	Land East of Humber Doucy Lane, Ipswich	Date	February 2024	Drawing No.	CSA/6675/100
Drawing Title	Statutory International Designations	Scale	Refer to scale	Rev	-
Client	Barratt David Wilson & Hopkins Homes	Drawn	LF	Checked	CH



N

- Site boundary
- Special Areas of Conservation (SAC)
- RAMSAR
- Special Protection Areas (SPA)
- Deben Estuary Zone of Influence
- Stour and Orwell Estuaries Zone of Influence
- Sandlings SPA Zone of Influence

0 5 10 km

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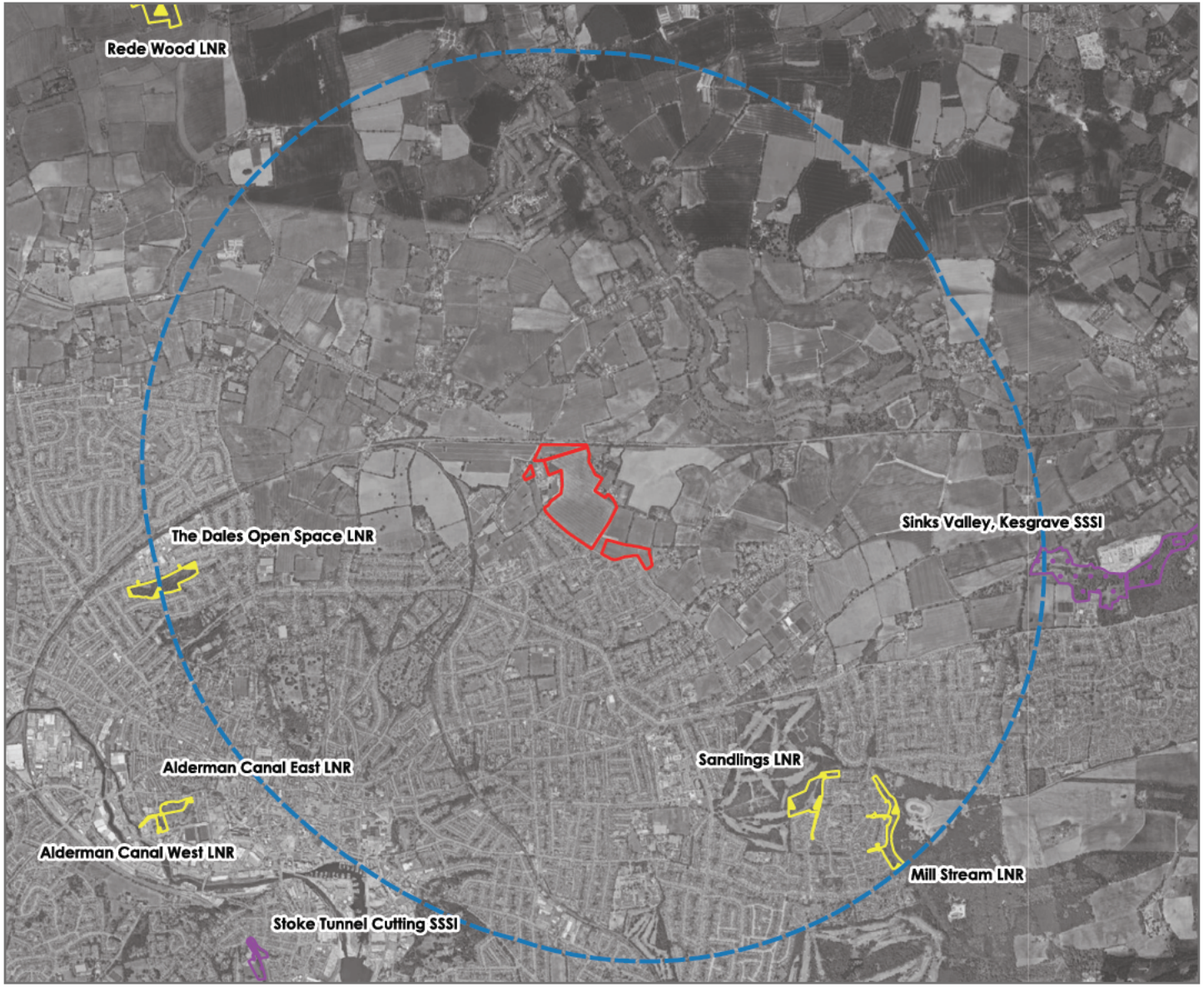
Project	Land East of Humber Doucy Lane, Ipswich	Date February 2024	Drawing No. CSA/6675/103
Drawing Title	Essex Coast Sites: Zones of Influence	Scale Refer to scale	Rev -
Client	Barratt David Wilson & Hopkins Homes	Drawn LF	Checked CH



N

Site boundary

3km buffer

Local Nature Reserves (LNR)

Sites of Special Scientific Interest (SSSI)

0 1.5 3 km

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Project	Land East of Humber Doucy Lane, Ipswich	Date	February 2024	Drawing No.	CSA/6675/101
Drawing Title	National/Local Statutory Designations	Scale	Refer to scale	Rev	-
Client	Barratt David Wilson & Hopkins Homes	Drawn	LF	Checked	CH

N

Site boundary

2km buffer

Local wildlife sites (LWS)

*Contains information from Suffolk Biodiversity Information Service. Exact boundaries of designations may differ.
For reference purpose only. No further copies may be made.

0 1 2 km

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Project	Land East of Humber Doucy Lane, Ipswich	Date	February 2024	Drawing No.	CSA/6675/104
Drawing Title	Non-statutory Designations	Scale	Refer to scale	Rev	-
Client	Barratt David Wilson & Hopkins Homes	Drawn	LF	Checked	CH

Site boundary

1km buffer

Priority Habitats

- Coastal and floodplain grazing marsh
- Deciduous woodland
- Good quality semi improved grassland
- Lowland dry acid grassland
- Lowland fens
- Lowland heathland
- No main habitat but additional habitats present
- Traditional orchard

0 0.5 1 km

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Project	Land East of Humber Doucy Lane, Ipswich	Date	February 2024	Drawing No.	CSA/6675/105
Drawing Title	Priority Habitats	Scale	Refer to scale	Rev	-
Client	Barratt David Wilson & Hopkins Homes	Drawn	LF	Checked	CH

Site boundary
250m Buffer
500m Buffer
Ponds (with number)

N

0 0.5 1 km

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Project	Land East of Humber Doucy Lane, Ipswich	Date	February 2024	Drawing No.	CSA/6675/102
Drawing Title	Waterbodies Plan	Scale	Refer to scale	Rev	-
Client	Barratt David Wilson & Hopkins Homes	Drawn	MD	Checked	CH

Appendix D

Photographs

Photograph 1. Land parcel at the north-west of the Site (between Tuddenham Road and Humber Doucy Lane, dominated by scrub.

Photograph 2. Area of neutral grassland to the east of F1 (arable field).

Photograph 3. Looking north along H15. The narrow field margin and crop within F1 can be seen.

Photograph 4. Small area of neutral grassland to the south-west of F1. H14 can be seen in the background.

Photograph 5. Looking north across the arable crop within F2.

Photograph 6. Looking south-east along the southern boundary of W1, and the narrow field margin of F2.

Photograph 7. Area of very little ground flora within woodland W1.

Photograph 8. Looking north along the western edge of W2, and the field margin of the arable field F2.

Photograph 9. Area of wider field margin at the west of F2, adjacent to the ground of Westerfield House (off-site to the west).

Photograph 10. Looking north-east along the quiet land between H14 and H5, at the north of the Site.

Photograph 11. Looking west along H9 and the modified grassland field F3.

Photograph 12. Looking north-west along H10, and the arable crop and narrow field margin within F4. This field margin is used regularly by locals, as it connects two public footpaths.

Appendix E

Habitats and Flora Species List

Table 1. Habitat Polygons

Site Name	6675 Land east of Humber Doucy Lane, Ipswich				
Survey Date and Surveyor(s)	16/08/2023 and 21/09/2023 Carly Howes ACIEEM				
Scientific Name	**Common Name**	Arable Field and Field Margins (c1c); F1, F2, F4	Mixed scrub (h3h)	Other woodland; broadleaved (w1g); W1	Other woodland; broadleaved (w1g); W2
Herb Species					
Chenopodium album	Fat-hen	X			
Achillea millefolium	Yarrow	X			
Aethusa cynapium	Fool's parsley	X			
Althaea officinalis	Marsh-mallow	X			
Alliaria petiolata	Garlic mustard	X	X		X
Anagallis arvensis	Scarlet pimpernel	X			
Anchusa arvensis	Annual bugloss	X			
Anthriscus sylvestris	Cow parsley	X	X	X	
Arctium minus	Lesser burdock	X	X		
Arum maculatum	Lords-and-ladies	X	X		X
Ballota nigra	Black horehound	X			
Calystegia arvensis	Field bindweed	X			
Calystegia sepium	Hedge bindweed		X		
Centaurea nigra	Common knapweed	X			
Cirsium arvense	Creeping thistle	X	X		
Cirsium vulgare	Spear thistle	X			
Clematis sp.	Clematis	X	X		
Conyza canadensis	Canadian fleabane	X			
Dipsacus fullonum	Wild Teasel	X			
Epilobium sp.	Willowherb	X		X	
Fallopia convolvulus	Black-bindweed	X			
Galium aparine	Cleavers	X	X	X	X
Geranium molle	Dove's-foot crane's-bill	X			
Geum urbanum	Wood avens	X		X	X
Glechoma hederacea	Ground-ivy	X		X	
Gnaphalium sp.	Cudweed	X			
Helminthotheca echioides	Bristly oxtongue	X			
Heracleum sphondylium	Hogweed	X	X		
Lactuca serriola	Prickly lettuce	X			
Lactuca virosa	Great lettuce	X			
Lamium album	White dead-nettle	X	X		
Lamium purpureum	Red dead-nettle	X	X		
Lapsana sp.	Nipplewort	X			
Malva sylvestris	Common mallow	X			
Mercurialis perennis	Dog's mercury	X			
Myosotis arvensis	Field forget-me-not	X		X	
Papaver sp.	Poppy	X			
Pentaglottis sempervirens	Green alkanet	X	X		
Plantago lanceolata	Ribwort plantain	X			
Plantago major	Greater plantain	X			
Prunella vulgaris	Selfheal			X	
Ranunculus repens	Creeping buttercup	X			
Raphanus raphanistrum ssp. raphanistrum	Wild radish	X			
Rumex obtusifolius	Broad-leaved dock	X		X	
Rumex sp.	Dock				X
Senecio jacobaea	Common ragwort	X			
Senecio vulgaris	Groundsel	X			
Sherardia arvensis	Field madder	X			
Silene latifolia	White campion	X			
Sisymbrium officinale	Hedge mustard	X	X		
Smyrnium olusatrum	Alexanders	X			
Solanum dulcamara	Bittersweet	X			
Solanum nigrum	Black nightshade	X			
Sonchus arvensis	Perennial sowthistle	X			
Sonchus asper	Prickly sowthistle	X			
Sonchus oleraceus	Smooth sowthistle	X	X		
Stellaria media	Common chickweed			X	
Taraxacum officinale agg.	Dandelion	X			
Torilis sp.	Hedge parsely	X			
Tripleurospermum inodorum	Scentless mayweed	X			
Urtica dioica	Common nettle	X	X		

Scientific Name	Common Name	Arable Field and Field Margins (c1c); F1, F2, F4	Mixed scrub (h3h)	Other woodland; broadleaved (w1g); W1	Other woodland; broadleaved (w1g); W2
Veronica persica	Common field-speedwell	X			
Viola arvensis	Field pansy	X			
Viola odorata	Sweet violet	X			
Grasses					
Agrostis stolonifera	Creeping bent	X			
Anisantha sterilis	Barren brome	X			X
Arrhenatherum elatius	False oat-grass	X			
Brachypodium sylvaticum	False brome	X		X	X
Bromus hordeaceus	Soft-brome	X			
Dactylis glomerata	Cock's-foot	X			
Elytrigia repens	Common couch	X			
Festuca rubra	Red fescue	X			
Hordeum murinum	Wall barley	X			
Lolium perenne	Perennial rye-grass	X			
Melica uniflora	Wood melick	X			
Phleum pratense	Timothy	X			
Crops					
Triticum aestivum	Bread wheat	X			
Vicia faba	Broad bean	X			
Woody Species					
Broadleaved					
Acer campestre	Field maple				X
Acer pseudoplatanus	Sycamore		X		
Aesculus hippocastanum	Horse-chestnut				X
Buddleja davidii	Butterfly-bush		X		
Carpinus betulus	Hornbeam			X	X
Corylus avellana	Hazel		X		
Crataegus monogyna	Hawthorn		X	X	
Fagus sylvatica	Beech			X	
Fraxinus excelsior	Ash			X	X
Hedera helix	Ivy	X	X		X
Prunus cerasifera	Cherry plum		X	X	
Prunus domestica	Plum		X		
Prunus spinosa	Blackthorn		X	X	
Quercus robur	Pedunculate oak			X	
Quercus sp.	Oak		X	X	X
Rosa arvensis	Field-rose				X
Rosa canina sp.	Dog-rose			X	
Rubus fruticosus agg.	Bramble	X	X	X	X
Sambucus nigra	Elder		X		
Tilia cordata	Small-leaved lime			X	X
Tilia x europaea	Common lime			X	
Ulmus sp.	Elm		X		X

Table 2. Linear Habitats

Site Name	6675 Land east of Humber Doucy Lane, Ipswich														
Survey Date and Surveyor(s)	16/08/2023 Carly Howes, 15/09/2023 Matthew Dale and Carly Howes; 27/10/2023 Matthew Dale and Laura Farrar														
Scientific Name	Common Name	Habitat Parcel Number/Habitat Type													
		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13	H14	H15
Herb Species																
Alliaria petiolata	Garlic mustard			X		X				X	X			X	X	
Anthriscus sylvestris	Cow parsley	X	X			X	X			X	X	X				
Arctium sp.	Burdock	X		X	X		X								X	X
Arum maculatum	Lords-and-ladies	X													X	
Ballota nigra	Black horehound		X			X				X	X					X
Bryonia dioica	White bryony	X	X	X						X	X				X	X
Calystegia sepium	Hedge bindweed									X						
Calystegia sp.	Bindweed													X		
Cirsium arvense	Creeping thistle	X								X				X		
Cirsium vulgare	Spear thistle									X						X
Clematis vitalba	Traveller's-joy	X				X			X		X				X	X
Dipsacus fullonum	Wild Teasel					X										
Epilobium sp.	Willowherb									X						
Epilobium tetragonum	Square-stalked willowherb				X							X				
Galium aparine	Cleavers			X		X			X	X					X	X
Helminthotheca echioides	Bristly oxtongue		X							X						
Heracleum sphondylium	Hogweed															X
Hypericum sp.	St John's-wort															X
Lamium purpureum	Red dead-nettle									X						
Lapsana sp.	Nipplewort										X					
Malva sp.	Mallow					X				X	X					
Pentaglottis sempervirens	Green alkanet									X						
Plantago lanceolata	Ribwort plantain									X						
Pulicaria dysenterica	Common fleabane					X				X						
Rumex obtusifolius	Broad-leaved dock	X		X	X											
Rumex sp.	Dock							X								
Senecio vulgaris	Groundsel									X						
Silene dioica	Red campion														X	
Silene latifolia	White campion														X	
Sisymbrium officinale	Hedge mustard										X					
Solanum dulcamara	Bittersweet	X														
Sonchus asper	Prickly sowthistle		X							X						
Stellaria media	Common chickweed									X						
Smyrnium olusatrum	Alexanders	X				X					X			X		
Tamus communis	Black bryony					X								X	X	
Urtica dioica	Common nettle		X	X	X	X	X	X						X	X	X
Grasses																
Anisantha sterilis	Barren brome										X	X				X
Arrhenatherum elatius	False oat-grass	X	X	X	X			x		X	X	X		X		X
Brachypodium sylvaticum	False brome	X	X	X	X	X	X	X	X			X				
Dactylis glomerata	Cock's-foot	X	X		X			X	X	X		X		X		X
Elytrigia repens	Common couch	X				X			X			X				
Holcus lanatus	Yorkshire-fog						X									
Hordeum murinum	Wall barley										X					
Lolium perenne	Perennial rye-grass										X				X	
Woody Species																

Scientific Name	Common Name	Habitat Parcel Number/Habitat Type														
		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13	H14	H15
Coniferous																
Cupressus macrocarpa	Monterey cypress							X								
Broadleaved																
Acer campestre	Field maple	X	X	X		X	X	X	X		X	X	X	X	X	X
Acer pseudoplatanus	Sycamore		X	X	X	X			X		X	X	X			
Aesculus hippocastanum	Horse-chestnut	X														
Carpinus betulus	Hornbeam		X	X			X	X								
Cornus sp.	Dogwood	X				X	X			X				X		
Corylus avellana	Hazel	X												X		
Crataegus monogyna	Hawthorn	X	X	X	X	X	X		X	X	X	X		X	X	X
Euonymus europaeus	Spindle	X														X
Fraxinus excelsior	Ash	X		X		X			X		X	X		X	X	
Hedera helix	Ivy	X		X	X	X			X	X	X	X		X	X	X
Ilex aquifolium	Holly													X		
Juglans regia	Walnut			X							X					
Malus sp.	Apple	X														
Malus sylvestris	Crab Apple	X														
Populus sp.	Poplar		X													
Prunus avium	Cherry				X											
Prunus cerasifera	Cherry plum				X	X										
Prunus domestica	Plum	X		X		X			X							
Prunus domestica ssp. insititia	Damson	X		X												
Prunus Spp.	Laurel							X			X					
Prunus spinosa	Blackthorn	X	X	X		X	X	X	X	X	X		X	X	X	X
Quercus robur	Pedunculate oak								X	X						
Quercus sp.	Oak	X				X			X	X	X			X	X	
Rosa arvensis	Field-rose		X	X		X				X				X	X	
Rosa canina sp.	Dog-rose	X						X	X	X	X				X	
Rosa sp.	Rose	X		X		X			X					X		
Rubus fruticosus agg.	Bramble	X	X	X		X		X	X	X	X	X	X	X	X	X
Salix sp.	Willow						X									
Sambucus nigra	Elder	X		X	X	X	X			X	X	X		X	X	
Symphoricarpos albus	Snowberry	X														
Ulmus glabra	Wych elm						X									
Ulmus procera	English elm										X		X		X	X
Ulmus sp.	Elm	X	X	X	X	X			X	X		X		X		

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