

Land off Longfield Road,
Meopham

Ecological Impact Assessment (EcIA)



Client:

Richborough

Report Reference:

RSE_8996_R2_V1_EcIA

Issue Date:

November 2025

This report contains confidential information relating to the location of badger setts. Due to the sensitive nature of this information, all reference to badgers should be redacted from the report prior to its release into the public domain and its circulation restricted.

PROJECT

Client: Richborough

Project: Land off Longfield Road, Meopham

Reference RSE_8996_R2_V1_EcIA

Report Title Ecological Impact Assessment

DOCUMENT CONTROL

Originated:	JC MCIEEM, CEcol	Associate Ecologist	20/10/2025
Technical Reviewed:	CS BSc (Hons)	Principal Ecologist	23/10/2025
Approved for Issue:	NS CEcol MCIEEM	Director	06/11/2025
Issued:	NS CEcol MCIEEM	Director	06/11/2025

Revisions:

East Midlands | West Midlands | Yorkshire | North West | South

☎ 0115 930 2493 | 📧 @rammsanderson | 📧 info@rammsanderson.com | 🌐 rammsanderson.com

DISCLOSURE:

The information provided within this report has been prepared and provided as true and in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct. It is intended for the sole use of the Client and their agents in accordance with the agreement under which our services were performed. Unauthorised communication, reproduction or usage of this report by any party other than the aforementioned is prohibited. No warranty, express or implied, is made as to the advice in this report or any other service provided by RammSanderson Ecology Ltd. This report has been prepared by an ecological specialist and does not purport to provide legal advice. RammSanderson is a trading name of RammSanderson Ecology Limited, as registered in England & Wales (Company No.: 8999992).



EXECUTIVE SUMMARY

- i RammSanderson Ecology Ltd were commissioned by Richborough to undertake an Ecological Impact Assessment to support an Outline application for residential (the 'Scheme') on Land off Longfield Road (the 'Application Site' or 'Site') situated adjacent to the village of Meopham, Kent.
- ii The Application Site is 6.24ha in size and consists of non-cereal cropland, modified grassland and two native hedgerows with a road along the northern boundary. A previous survey of the area and the wider landscape was undertaken to inform an initial assessment of the likelihood of protected species on the Site. The Preliminary Ecological Appraisal Report or PEAR (RammSanderson, 2025) identified an active badger sett to the southeast of the Site. While this is within the 30m disturbance buffer from the Site boundary, no earthworks are anticipated within this distance. Therefore, disturbance is unlikely to occur and no licence to either disturb or close the sett is required from Natural England, provided proposed orchard trees are planted by hand and not within 20m of any sett entrances.
- iii The habitat on Site had very low suitability for reptiles and great crested newts due to the dominance of arable fields, with only marginal vegetation offering limited refuge and foraging opportunities. Therefore, standard precautionary measures detailed within a standalone Construction and Ecology Management Plan is recommended to mitigate residual risk and further surveys for these species was scoped out.
- iv The potential for birds of conservation concern, foraging bats and dormice on the Site was identified within the PEAR and further surveys were recommended. These have since been undertaken with no significant bird/bat records or dormouse presence identified.
- v No evidence of any protected species was recorded within the Application Site, and it is considered likely that only nesting birds may be present and potentially impacted by the works. Mitigation to either avoid the nesting season or check vegetation and buildings prior to demolition would protect birds and prevent impacts to this species group.
- vi Standard measures to control pollutants, dust and other contaminants would protect the woodland, which is situated along the southern boundary to the Application Site. In addition, a 15m buffer from this woodland should be maintained to protect the roots. A 30m buffer from the active badger sett in the southern woodland should also be maintained, as is proposed. A pre-commencement badger survey within three months of works on Site is recommended timed to allow a sett closure (only permitted between July-November) if required.
- vii One hedgerow will be retained on Site. Works will result in the loss of the arable field and temporary loss of some of the modified grassland. The landscape planting scheme includes the creation of other neutral grassland, modified grassland, a native hedgerow along the southern boundary, Sustainable Urban Drainage System (SUDs), trees and residential buildings with associated hard standing on-site.
- viii This Scheme would deliver a 12.2% net gain of biodiversity units and 385.29% for hedgerows, and therefore would be in accordance with national legislation (Environment Act, 2021) as well as national (National Planning Policy Framework) and local planning policies (The Gravesham Local Plan Core Strategy adopted in September 2014 and the Kent Biodiversity Strategy, 2020).

CONTENTS

EXECUTIVE SUMMARY	3
1 INTRODUCTION	6
2 METHODOLOGY	7
3 BASELINE CONDITIONS AND NATURE CONSERVATION IMPORTANCE	11
4 IMPACT ASSESSMENT, AGREED MITIGATION MEASURES AND SIGNIFICANCE OF RESIDUAL EFFECTS	24
5 BIODIVERSITY NET GAIN	28
6 CONCLUSION	29
7 FIGURES	30
8 REFERENCES	48
APPENDIX 1: RELEVANT LEGISLATION AND PLANNING POLICY	49
APPENDIX 2: METHODOLOGY	52

FIGURES

FIGURE 1: SITE LOCATION PLAN	30
FIGURE 2: UKHABS PLAN	31
FIGURE 3: WATERBODY PLAN	32
FIGURE 4: WINTERING BIRD SURVEY RESULTS PLAN (SURVEY 1, 21/01/2025)	33
FIGURE 5: BIRD SURVEY RESULTS PLAN (SURVEY 2, 26/02/2025)	34
FIGURE 6: BREEDING BIRD SURVEY RESULTS PLAN (SURVEY 1, 30/04/2025)	35
FIGURE 7: BREEDING BIRD SURVEY RESULTS PLAN (SURVEY 2, 15/05/2025)	36
FIGURE 8: BREEDING BIRD SURVEY RESULTS PLAN (SURVEY 3, 29/05/2025)	37
FIGURE 9: BREEDING BIRD SURVEY RESULTS PLAN (SURVEY 4, 12/06/2025)	38
FIGURE 10: BADGER SURVEY RESULTS PLAN	39
FIGURE 11: DORMOUSE SURVEY LOCATIONS	40
FIGURE 12: GROUND LEVEL ROOST ASSESSMENT	41
FIGURE 13: BAT STATIC LOCATIONS	42
FIGURE 14: BAT TRANSECT SURVEY 1	43
FIGURE 15: BAT TRANSECT SURVEY 2	44
FIGURE 16: BAT TRANSECT SURVEY 3	45
FIGURE 17: BIA BASELINE VISUALISATION	46
FIGURE 18: BIA PROPOSED VISUALISATION	47

TABLES

TABLE 1. BACKGROUND RECORDS AND FIELD SURVEYS STUDY AREAS	8
TABLE 2. FIELD SURVEYS UNDERTAKEN TO INFORM ECIA	9
TABLE 3. DESIGNATED SITES WITHIN STUDY AREA	11
TABLE 4. HOPI, ANCIENT WOODLAND AND PROTECTED AND NOTABLE FLORA WITHIN STUDY AREA	12
TABLE 5: HABITATS WITHIN SURVEY AREA	14
TABLE 6. SUMMARY OF BADGER PRESENCE/ POTENTIAL PRESENCE WITHIN THE SURVEY AREA	17
TABLE 7: STATIC BAT DETECTOR SURVEY RESULTS SUMMARY	20
TABLE 8. SUMMARY OF NATURE CONSERVATION IMPORTANCE	23
TABLE 9: CRITERIA FOR BAT ROOST POTENTIAL ASSESSMENT OF TREES	53
TABLE 10: HAZEL DORMOUSE NEST TUBES SURVEY EFFORT	54
TABLE 10: SURVEY DATES	55
TABLE 11: SUMMARY OF GROUND LEVEL TREE ASSESSMENT RESULTS	57
TABLE 12: STATIC MONITORING RESULTS STATIC 1	58
TABLE 13: STATIC MONITORING RESULTS STATIC 1	59
TABLE 14: HABITAT DESCRIPTIONS	60

1 INTRODUCTION

1.1 Terms of Reference

- i RammSanderson Ecology Ltd (RS) were commissioned by Richborough (the Applicant) to undertake an Ecological Impact Assessment (EclA) to support an Outline application for the erection of residential dwellings, public open space and associated works. Approval is sought for the principal means of vehicular access from Longfield Road, and all other matters are reserved (hereafter referred to as the 'Scheme'), located off Longfield Road in Meopham, Kent. All land situated within the red line of the Scheme is hereafter referred to as the 'Application Site' or 'Site' and is shown on Figure 1.
- ii The purpose of this EclA is to demonstrate how the Scheme accords with relevant national and local planning policy and legislation. Further details on relevant planning policy and legislation are provided in Appendix A.
- iii This EclA details the methodology followed to undertake the assessment, describes the ecological baseline relevant to the Scheme and evaluates the nature conservation importance of ecological features present within the Study Area (see Section 2). The EclA characterises the impacts (both positive and negative) of the Scheme on Important Ecological Features (IEF)¹, and where necessary, sets out appropriate and proportionate avoidance, mitigation and compensation measures that will be delivered by the Applicant. The significance of any residual effects (both positive and negative) of the Scheme on the IEFs has been assessed, and opportunities for enhancement are identified with the overall aim of achieving biodiversity net gain through the Scheme.
- iv This EclA forms part of the supporting technical documentation for the planning application submitted for the Scheme and has been undertaken with reference to current good practice² and is consistent with the requirements of British Standard 42020:2013 *Biodiversity. Code of Practice for Planning and Development*.

1.2 The Scheme

- i The Scheme relates to levelling the majority of the Site (currently used as cropland) to facilitate the construction of up to 120 residential units, with associated hard standing, soft landscaping, SUDs and car parking.

1.3 The Application Site

- i The Site is located within the village of Meopham, Kent at Ordnance Survey national grid reference TQ 64020 66745 and is approximately 6.24ha in size.
- ii The Site comprises primarily cropland habitats, with modified grassland margins, bordered by hedgerows. The Site is bounded by areas of woodland, additional cropland and residential areas, and the wider area consists of further agricultural and residential areas.

¹ Important Ecological Features are habitats, species, ecosystems and their functions and processes that are of conservation importance and could potentially be affected by the Scheme. Various characteristics contribute to a feature's importance including its rarity, diversity, size, population trend, distinctiveness, naturalness, fragility, typicalness, recorded history, potential value and intrinsic appeal.

² CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland. Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.

2 METHODOLOGY

2.1 Scope of the EcIA

i The EcIA has been undertaken as follows:

- Define the Study Area for the assessment, which considers the Zone of Influence³ (ZoI) of the Scheme.
- Undertake desk and field-based assessments for designated sites, habitats and species to determine the ecological baseline for the Scheme within the Study Area.
- Determine the nature conservation importance of each ecological feature recorded during the desk and field-based assessments to determine which of those features are IEFs in the context of the EcIA.
- Assess the potential impacts on IEFs because of the Scheme.
- Design suitable avoidance and mitigation measures to address potential impacts.
- Determine the significance of any residual effects and design suitable compensation measures to address significant residual effects; and,
- Identify opportunities for biodiversity enhancements including delivery of Biodiversity Net Gain (BNG).

2.2 Important Ecological Features

i The EcIA has focused on the potential impacts to ecological features (habitats, species, ecosystems and their functions/ processes) that are considered important and potentially affected by the Scheme. The EcIA has not carried out detailed assessments of features that are sufficiently widespread, unthreatened and resilient to impacts and which will remain viable and sustainable should the Scheme proceed as detailed in Section 1.

ii For this EcIA, the following are considered IEFs requiring detailed assessment:

- Statutory designated sites.
- Non-statutory designated sites.
- Habitats and species of principal importance (HoPI / SoPI) for the conservation of biodiversity in England⁴.
- Irreplaceable habitats including ancient woodland and veteran trees.
- Individual habitat types or mosaics that may not qualify as HoPI but form an important part of ecosystems and their function.
- Legally protected species⁵
- Species of conservation concern, Red Data Book (RDB) species – UK⁶.
- Birds of Conservation Concern – UK⁷.

iii The EcIA has also considered legally controlled plant species listed as invasive on Schedule 9 of the Wildlife and Countryside Act 1981 in Britain (e.g., Japanese knotweed, Himalayan balsam, giant hogweed).

2.3 Study Area

i Desk and field-based studies have been undertaken to establish the biodiversity baseline that may be impacted by the Scheme. The scale of the Study Areas varies dependent upon the ecology of the feature being assessed

³ The Zone of Influence is the area over which ecological features may be affected by biophysical changes because of the Scheme and associated activities.

⁴ Listed under S41 of the Natural Environment and Rural Communities Act 2006.

<http://publications.naturalengland.org.uk/publication/4958719460769792>.

⁵ Legally protected species are those listed on the Wildlife and Countryside Act 1981, The Conservation of Habitats and Species Regulations 2018, Protection of Badgers 1992.

⁶ Species Status Assessment project published by Joint Nature Conservation Committee (JNCC) in 1999.

<http://jncc.defra.gov.uk/default.aspx?page=3352>.

⁷ (Eaton MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD (2015). Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and Isle of Man.

and its vulnerability to change resulting from construction and operation of the Scheme. Ecological features outside of the Study Area are unlikely to be affected by the Scheme and are not considered in this EclA.

- ii Table 1 summarises the Study Area for the Scheme.

Table 1. Background Records and Field Surveys Study Areas

Ecological Feature	Background Records Study Area ⁸	Field Survey Study Area ⁹
Designated Sites and Habitats	2km	Within and adjacent to the Application Site
Great crested newt	1km	500m
Badger	1km	30m
Other protected and notable species	1km	Within and adjacent to the Application Site

2.4 Desk Study

2.4.1 Background Records

- i A desk study has been undertaken to obtain background records relevant to the Scheme and the EclA, including records of statutory and non-statutory designated sites and protected and notable species within the Study Areas detailed above in Table 1. The data obtained provides contextual information for the scope of field surveys, to aid the evaluation of field survey results, and to provide supplementary information where complete field survey coverage has not been possible.
- ii Data has been obtained from Kent and Medway Biological Records Centre in February 2025.

2.4.2 Planning Policy

- iii To demonstrate how the Scheme accords with relevant national and local planning policy, the following have been reviewed as part of this assessment:
- The Gravesham Local Plan Core Strategy adopted in September 2014; and
 - Kent Biodiversity Strategy 2020.

2.5 Field Surveys

- i Field surveys have been designed to collect information on the habitats and species present that may be affected by the Scheme. The geographical areas across which field surveys have been undertaken are the areas over which ecological features are likely to be subject to impacts from the construction or operation of the Scheme if they are present and accounting for the Scheme design measures detailed in Section 1.
- ii Table 2 summarises the field surveys that have been undertaken to inform the EclA.
- iii Detailed methodologies for collection of field survey data, and any specific limitations and deviations encountered during these surveys, are presented in Appendix 2.

⁸ Distance measured from the Application Site Boundary.

⁹ Distance measured from the Application Site Boundary.

Table 2. Field Surveys undertaken to inform EclA

Ecological Feature	Survey Type	Date(s) of Survey(s) ¹⁰
Habitats	UKHabitat Survey	Winter 2024/Updated Summer 2025
Wintering birds	Wintering Bird Survey	Winter 2024
Breeding birds	Breeding Bird Survey	Spring 2025
Badger	Badger Survey	Spring 2025
Bats	Night time walkovers and static monitoring	Spring, summer and autumn 2025
	Ground Level Tree Assessment (GLTA)	Summer 2025
Dormice	Presence/likely absence	Spring-autumn 2025

- iv No other field surveys have been undertaken to support this EclA as they were considered unnecessary (see Section 3 for more details).

2.6 Assessment criteria

- i This EclA broadly follows CIEEMs Guidelines for Ecological Impact Assessment in the United Kingdom with the following clarifications specific to the Scheme.

2.6.2 Nature conservation evaluation

- ii Several criteria have become accepted as a means of assessing the nature conservation importance of a defined area of land which are set out in *A Nature Conservation Review*¹¹ and include diversity, rarity and naturalness.
- iii For this EclA, the nature conservation importance or potential value of an ecological feature is determined within the following geographic context:
- International (Europe): such as Special Areas of Conservation (SAC) or Special Protection Areas (SPA).
 - National (England): such as Sites of Special Scientific Interest (SSSI);
 - Regional (*): such as populations of species which enrich biodiversity on a regional scale and whose loss would significantly affect the species national distribution.
 - County (Kent): such as Local Nature Reserves (LNR) or populations of species which qualify for Local Wildlife Site (LWS) designation.
 - Local (Meopham): undesignated ecological features such as old hedges, woodlands, ponds;
 - Site: the feature has some ecological importance, but is not of a scale warranting consideration outside of the boundaries of the Application Site itself; and
 - Negligible: the feature either has little or no importance for biodiversity, or is considered sufficiently widespread, unthreatened, and resilient to impacts and will remain viable and sustainable.

¹⁰ Full dates provided in Appendix 2

¹¹ Ratcliffe, D. (1977). *A Nature Conservation Review*.

*A geographical area for Regional importance has not been defined. A feature is of 'Regional' importance when it is of greater geographical importance than within Kent, but does not reach the threshold to be of National importance.

- iv Ecological features of Local or higher nature conservation importance are considered IEFs requiring detailed assessment. In addition, for the EclA to demonstrate how the Scheme will comply with statutory requirements and policy objectives for biodiversity, some ecological features are considered IEFs even if they are not of Local or higher nature conservation importance. These are features that are protected by national legislation and include:
- Badgers, legally protected through the Protection of Badgers Act, 1992;
 - All nesting birds, legally protected through the Wildlife and Countryside Act, 1981; and,
 - Non-native invasive plant species, listed on Schedule 9 of the Wildlife and Countryside Act, 1981.

2.6.3 Temporal scope

- v Potential impacts on IEFs have been assessed in the context of how the predicted baseline conditions might change between the surveys and the start of construction.
- vi Long-term trend information was used to make judgements about the significance of an impact or effect on the conservation objectives or condition of a designated site, or the conservation status of a habitat or species (for example a species with a long term, national population decline may be more susceptible to impacts attributable to the Scheme). Where this information was available it is referenced in Section 4.
- vii A high-level construction programme for the Scheme is outlined in Section 1. Once construction is complete, this EclA has assumed that the operational phase of the Scheme will last for the foreseeable future.

2.6.4 Approach to mitigation

- viii Where impacts on IEFs are predicted, the approach to mitigation engages the following hierarchy:
- Avoid features where possible.
 - Minimise impact by design, method of working or other measures, for example by enhancing existing features; and,
 - Compensate for significant residual impacts (e.g., by providing suitable habitats elsewhere).
- ix The highest level of the hierarchy has been applied where possible. Only where this cannot reasonably be adopted have lower levels been considered. The rationale for the proposed level of mitigation has been detailed in Section 4, including sufficient detail to show that these measures are feasible and will be provided by the Applicant.
- x NPPF (2024) states that:
- “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”.*
- xi Throughout this EclA, the potential to secure biodiversity enhancement, and therefore overall net gain, has been considered.

2.7 Limitations to the Assessment

- i The ecological surveys undertaken to support this EclA have not produced a complete list of plants and animals and the absence of evidence of any particular species should not be taken as conclusive proof that the species is not present or that it will not be present in the future. However, the results of these surveys have been reviewed and are considered to be sufficient to undertake this EclA.

3 BASELINE CONDITIONS AND NATURE CONSERVATION IMPORTANCE

- i The following sections provide a summary of the baseline conditions relevant to the Scheme and the assessment of potential impacts of the Scheme on biodiversity. The baseline is based on the results of the desk and field-based studies undertaken within the Study Area to inform this EclA.
- ii Regarding background data, 'recent' records are considered to be those no older than 10 years from the date of the desk study. Records outside of this period are historical and have only been reported where more recent records do not exist. Exceptions to this are detailed in the appropriate sections below.
- iii Ecological features which are present or considered likely to be present within the Study Area have been assigned a geographical scale of nature conservation importance in line with the criteria detailed in Section 2. Nature conservation importance is summarised in Table 6.
- iv Where it has not been possible to achieve 100% survey coverage for a habitat or species, the baseline conditions have been based on a reasonable precautionary approach, supported by the results of the desk study.

3.2 Designated Sites

- i Table 3 summarises the designated sites situated within the Study Area.

Table 3. Designated Sites within Study Area

Site Name	Designation	Location ¹²	Brief Description
Henley Wood & Pasture	LWS ¹³	1.3km SE	Ancient Woodland and Deciduous Woodland Priority Habitat
Happy Valley, Meopham	LWS ²	1.1km S, additional two parcels further south.	Contains Ancient woodland, Ancient Replanted Woodland, Deciduous Woodland and Lowland Calcareous Grassland Priority Habitats.
Strawberry Hill, Pasture & Woodland, Meopham	LWS ²	1.7km SE	Ancient Woodland and Deciduous Woodland Priority Habitat
Elbow Wood etc, Meopham	LWS ²	1.3km SW	Ancient Woodland, Deciduous Woodland and Lowland Calcareous Grassland Priority Habitats.
Nurstead and Cozendon Woods, Nash Street	LWS ²	1.5km N, additional one parcel connected but further north.	Ancient Woodland and Deciduous Woodland Priority Habitat
Hartley Wood	LWS ²	2km NW	Deciduous Woodland Priority Habitat
Pasture south of Istead Rise	LWS ²	1.9km NW	-
Longfield Road (East)	RNR ¹⁴	0.3km NW	-

¹² Where designated sites are situated outside of the Site boundary, the distance and direction is given at the closest point of the designated site from the Site

¹³ LWS – Local Wildlife Site

¹⁴ Roadside Nature Reserve

Site Name	Designation	Location ¹²	Brief Description
Longfield Road (West)	RNR ³	1.4km NW	-
Wrotham Road	RNR ³	1.3km N	Overlaps with Nurstead and Cozendon Woods, Nash Street LWS and Ancient Woodland.

3.3 Habitats

3.3.1 Desk Study

- i Table 4 summarises relevant records of HoPI¹⁵, ancient woodlands, and protected and/or notable¹⁶ flora¹⁷ (including veteran trees¹⁸) within the Study Area.

Table 4. HoPI, Ancient Woodland and Protected and Notable Flora within Study Area

Habitat/ Flora Feature	Reason for Conservation Interest	Location ¹⁹	Desk Study Comments
Rabbit Wood North	Ancient Woodland	0.3km W	Additional 17 parcels in wider landscape
Deciduous Woodland	Priority Habitat, LBAP	Closest parcel 10m N; additional 86 ²⁰ parcels to the north, south, east and west of the Site.	Scattered areas of Deciduous Woodland. Some overlap with Ancient Woodland.
Woodpasture and Parkland	May support ancient woodland, ancient trees and veteran trees.	0.8km E	Overlaps with Deciduous Woodland.
Traditional Orchards	Priority Habitat, LBAP	Closest 1km E, additional 12 ²¹ parcels to the northeast, northwest, southeast and south.	Small in extent scattered areas of Traditional Orchards
Lowland Calcareous Grassland	Priority Habitat	1.5km S, additional 5 ²² parcels south, southeast and southwest.	Exists adjacent to areas of Ancient Woodland. SE parcel overlaps

¹⁵ Priority habitats are taken as principal habitats for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006.

¹⁶ Protected and/or notable flora are taken as principal flora for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006; any flora listed in an IUCN Red Data Book; and any other flora listed under the County Rare and Scarce Plants in Buckinghamshire list (BMERC, 2012).

¹⁷ For this assessment 'flora' includes: vascular and non-vascular plants, fungi and lichens.

¹⁸ For this assessment the definition of a veteran tree is taken from Annex 2 of the National Planning Policy Framework (glossary): "A tree which, because of its great age, size or condition is of exceptional value for wildlife, in the landscape, or culturally."

¹⁹ Where features are situated outside of the Site boundary, the distance and direction is given at the closest point of the designated site from the Site

²⁰ Six parcels are considered 'no main habitat but deciduous woodland present' by MAGIC.

²¹ Two parcels are considered 'no main habitat but traditional orchards present' by MAGIC.



²² Two parcels are considered 'no main habitat but lowland calcareous grassland present' by MAGIC.



Habitat/ Flora Feature	Reason for Conservation Interest	Location ¹⁹	Desk Study Comments
			with Deciduous Woodland.
Bluebell	Schedule 8 of Wildlife and Countryside Act	80m NE	4 records found in desk study.
Common Rhododendron	Schedule 9 Plant Species	0.6km S	1 record found in desk study.
Himalayan Cotoneaster	Schedule 9 Plant Species	0.8km S	1 record found in desk study.
Variegated Yellow Archangel	Schedule 9 Plant Species	0.8km E	2 records found in desk study.

3.3.2 Field Survey

- ii Table 5 summarises the results of the habitat survey and detailed botanical surveys. Habitats are shown on Figure 2, with specific features highlighted by TNs. Native hedgerows formed of >80% woody species were recorded on Site. These are Habitats of Principal Importance / HPI (NERC Act, 2006).
- iii Habitat types detailed are listed in order of the UKHab Survey Handbook (UKHab Ltd, 2023). The species list provided in this report reflect only those taxa observed during the survey and are not an exhaustive list of all species that may be present, as the survey only provides a snapshot of the Site.

Table 5: Habitats within Survey Area

Habitat	Description	Area (m ²)	Proportion of Site (%)	Ecological Importance & Outcome of Proposal	Photograph
g4 Modified grassland	<p>In multiple areas around the boundary of the Site, the dominate cropland habitat was bordered by modified grassland strips. The sward was generally low with evidence of vehicle tracks in places.</p> <p>These strips were generally dominated by perennial rye grass, with abundant examples of cocks foot, dandelion, nettle and creeping buttercup. Frequently, spear thistle and broadleaved dock were observed. Bristly oxtongue, ragwort and hogweed were noted occasionally, with rare examples of winter heliotrope.</p> <p>Examples of badger setts (TN1) and badger latrines (TN2) were observed within 30m of the southern G4 grassland parcel beyond the boundary of the Site within adjacent (potentially ancient) woodland.</p>	1014.53	1.63	<p>Limited ecological value due to the lack of floral diversity, vehicle tracking through the grass and limited spread of the habitat within the Site. This habitat is mostly noted for its suitability for commuting and foraging mammals, such as badger.</p> <p>This habitat is likely to be retained and enhanced throughout the Site.</p>	
cd18 Other non-cereal crops	<p>The Site was dominated by non-cereal cropland, covering over 90% of the Site area.</p>	59236.11	94.95	<p>Limited ecological value due to the current management, presence of bird scaring devices, lack of floral diversity and openness of the habitat. Mostly noted for its suitability to support commuting and foraging mammals, such as badger. May also support ground nesting birds once the bird scaring devices are no longer in use.</p> <p>This habitat is due to be developed as part of the proposed Scheme, or enhanced.</p>	

Habitat	Description	Area (m ²)	Proportion of Site (%)	Ecological Importance & Outcome of Proposal	Photograph
h2a6 Other native hedgerow	One native hedgerow was located on Site boundaries. H1 is a short section of poorly managed blackthorn hedgerow, with multiple gaps, running alongside the road to the north. It was 48m in length.	N/A	N/A	Ecologically valuable. Provides a commuting and foraging corridor for a range of species, such as terrestrial mammals and bats, commuting and refuge for amphibians and reptiles and nesting habitat for birds. Likely to be retained and enhanced as part of the proposed Scheme.	
u1b Developed land sealed surface	A sealed road was present on Site along the northern boundary	2135.1	3.42	No ecological value.	

- iv The habitat mosaic of grassland, crops and hedgerow vegetation within the Application Site is of Site level nature conservation importance. These habitats are common and widespread across the wider landscape, are not botanically diverse nor do they offer significant opportunities for notable or protected species.

3.4 Great Crested Newt (and other amphibians)

3.4.1 Desk Study

- i There are no recent records of great crested newts (GCN) within the Study Area, nor licence returns or pond surveys for GCN.
- ii A total of three water bodies are present within 500m of the Site, as seen on Figure 3.

3.4.2 Field Survey

- iii No features within the Site were identified that could support breeding GCN.
- iv The dominant cropland habitat throughout the Site was observed as being negligible for terrestrial GCN suitability due to the open, exposed nature of the habitat with limited refuge opportunities.
- v GCN have assigned a geographical scale of negligible nature conservation importance and are not considered further in this assessment. Precautionary working methods detailed within a Construction and Ecology Management Plan should be implemented during works to remove residual impacts.

3.5 Common Species of Reptile

- i 'Common species of reptile' refers to common lizard, slow worm, adder and grass snake. The Site is located outside of the known range of smooth snake. While sand lizard are present at reintroduction sites in Kent, these are confined to the southern coast and these species are not considered in this report.

3.5.2 Desk Study

- ii One record of common lizard was identified within the Study Area. This was 80m northeast of the Site boundary. No records of adder were returned within the Study Area.

3.5.3 Field Survey

- iii The predominant cropland habitat observed on Site was deemed to have limited suitability for reptiles due to the openness and lack of shelter throughout the Site. Boundary habitats, such as the hedgerows and grasslands offer limited potential for commuting, foraging and refuge and may be used by very low numbers of slow worm, common lizard or grass snake. No suitable adder habitat was recorded on Site.
- iv Reptiles have assigned a geographical scale of negligible nature conservation importance and are not considered further in this assessment. Precautionary working methods detailed within a Construction and Ecology Management Plan should be implemented during works to remove any risk of residual impacts.

3.6 Birds

3.6.1 Desk Study

- i There are recent records for 15 notable bird species within the Study Area. These include one species listed on Annex I of the EC Birds Directive 1994, five species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), three Species of Principal Importance (SPI), six species on the Conservation Concern 5 (BoCC5) Red list (Stanbury, 2021) and six species on the BoCC5 Amber list. The records also include one species of bird, swift, that is a priority species in Kent listed on the Kent BAP.

3.6.2 Field Survey

- ii The Site was noted for its suitability for ground nesting birds, such as skylarks, due to the predominance of arable cropland throughout the Site, as well as common and widespread birds within the boundary hedgerow habitats. A series of wintering bird and breeding bird surveys were undertaken in 2025. The wintering bird surveys were cancelled following the second survey as bird scarers were recorded, which reduced the suitability

for birds at that time of year while the crop established. No species of note were recorded during those surveys (results shown in Figures 4 to 5).

- iii The breeding bird surveys were undertaken in spring/summer 2025. The May survey did record one singing skylark outside the Site boundary to the southwest. Other species recorded were not of conservation note and comprised wood pigeon, magpie, robin, great tit, black bird, blue tit and other common garden birds. A dunnoek was recorded offsite to the north (results shown in Figures 6, 7, 8, and 9).
- iv Birds within the Application Site are therefore of Site nature conservation importance due to one breeding pair of skylark.

3.7 Badger


3.7.1 Desk Study

- i There were two recent records of badger within the Study Area, with the closest being c.400m from Site (northeast).



3.7.2 Field Survey


- ii Evidence of badger was recorded within the Study Area. Badgers are known to be present in the woodland adjacent to the south of the Site. Two active badger setts were recorded; one main and an annex. A large latrine was also recorded adjacent to the main sett entrances. The closest in active use hole to the Site was recorded c.10m south of the Application Site (active hole of Annex sett). Furthermore, badger paths and latrines were also recorded along Site boundaries or adjacent to the Site. An additional main sett is located further south within the same parcel of woodland as the annex.
- iii Table 6 summarises the evidence of badger presence recorded within the Survey Area. Locations of any badger setts have been kept deliberately vague due to the on-going persecution this species is subject to.
- iv Features in Table 6 are shown as target notes on CONFIDENTIAL Figure 2. and in more detail in CONFIDENTIAL Figure 10.

Table 6. Summary of Badger presence/ potential presence within the Survey Area

Feature	Description of Feature and Location ²³	Relevant Target Notes	Photographs
Sett 1 - Main	Twenty well used holes with bedding, hairs, spoil heap and latrine within the woodland parcel south of the Site, extending east into the arable field adjacent.	TN1	

²³ Where features are situated outside of the Site boundary, the distance and direction is given at the closest point of the feature from the Site

Feature	Description of Feature and Location ²³	Relevant Target Notes	Photographs
			
Sett 2 – Northern Annex	Two well used active holes, one partially used hole and four disused holes were recorded here. Well worn paths connected to main sett.		

Feature	Description of Feature and Location ²³	Relevant Target Notes	Photographs
Latrines	Latrines were observed within the woodland. These had fresh dung present.		

- v There is little in the way of opportunities for badger within the Application Site unless a favoured crop is grown on the arable field. The modified grassland offers optimal foraging but is limited in extent with more suitable habitat located southwest and east (cropland and woodlands). Therefore, badgers have been assigned a value of Site nature conservation value.

3.8 Hazel Dormice

3.8.1 Desk Study

- i No records of dormice were returned in the desk study. However, Kent is a known stronghold for this species and so absence cannot be assumed based upon a lack of records for this illusive species.

3.8.2 Field Survey

Tubes

- ii A total of 25 tubes were placed in good habitat along the edges of the Site (15 in the northern hedgerow and 10 in the southern woodland shown in Figure 11). While 50 tubes are recommended for detection of dormice at a site, the vast majority of the Site was unsuitable habitat. Therefore, an additional 50 tubes were also installed in the wider landscape in good habitat to the southeast to increase detection in local hedgerows and woodlands. These were installed by Maisie Ryan whom holds a Natural England dormouse licence. Tubes were checked every month over five visits from May – September as per guidance (Appendix 2 (Wells et al, 2025)).
- iii No signs of dormice were recorded during surveys, and these are not given a geographic scale of nature conservation importance.

3.9 Bats

3.9.1 Desk Study

- i There were 10 recent records of bats within the Study Area, relating to common pipistrelle, soprano pipistrelle, noctule, Leisler and serotine species.

3.9.2 Field Survey

Trees

- ii Two of the trees, both identified as ash, within the Application Site, noted as T1 and T2 within figure 12 and table 12, offered roosting opportunities for bats. Both trees were classified as PRF-I. This means they are potentially suitable for low numbers of bats. All other trees on Site lacked suitable roost features and therefore they were all categorised as Negligible roosting potential. Results are shown in figure 12 and table 11.

Activity

- iii Habitats on the Application Site, such as hedgerows with trees and a small parcel of woodland immediately outside the southern boundary, are considered suitable for foraging and commuting bats and are well connected to the surrounding landscape. However, the majority of the Site is unsuitable for foraging bats. Therefore, the Application Site was assessed as having 'Low value for commuting and foraging bats. Field surveys were conducted as per the methodology of the Bat Survey Guidelines (BCT, 2023).
- iv Transect surveys were undertaken along site Automated/static bat detector surveys. Static surveys include a minimum of five consecutive nights during April, July and September, and seasonal walked activity transects in spring, summer and autumn were undertaken across the Application Site.
- v The static detectors were positioned in habitats/areas which would likely be of importance to local bat populations or areas that would be significantly impacted by the Scheme, as shown on Figure 13. Static 1 was positioned in the northwest of the site within a hedgerow, with static 2 situated to the east of the small parcel of woodland outside the southern boundary.
- vi The static detector surveys recorded relatively low numbers of bat passes, of mostly common and widespread species; common pipistrelle was the species recorded most frequently (84% of all bat passes), with occasional observations of serotine and Leisler's. Other species were also recorded in very low numbers including soprano pipistrelle, Nathusius' pipistrelle, noctule, myotis species, and brown long-eared bat. July recorded the most bat passes with significantly more passes being recorded at static location 2 to the south.
- vii Table 7 provides a summary of the static detector monitoring results. The figures in the table are the total passes for each species recorded by both static detectors across the entire monitoring period from April to September. Locations of the static detectors are shown on figure 15, and more detailed results are detailed in Appendix 3 tables 11 and 12.

Table 7: Static bat detector survey results summary

	Common Pipistrelle	Soprano Pipistrelle	Nathusius , Pipistrelle	Noctule	Leisler's	Myotis Sp.	Serotine	Brow Long eared
Total passes / species	2030	23	1	17	182	11	244	11

Night-time bat walkover surveys

- viii Three night-time bat walkover surveys were scheduled in 2025 and undertaken on 23rd April, 9th July and 2nd September 2025.

Night-time bat walkover survey 1

- ix The first transect survey was conducted in optimal conditions and in line with the current guidelines at the time of the survey (Collins, 2023). The survey commenced at 20:08 which was the same time as sunset and started with a 30-minute static assessment, with surveyors noting any activity at the start point. No activity was recorded within the site during the survey period. (Results shown in Figure 14)

Night-time bat walkover survey 2

- x The second transect survey was conducted in optimal conditions and in line with the current guidelines at the time of the survey (Collins, 2023). The survey commenced at 21:15 which was the same time as sunset and started with a 30-minute static assessment, with surveyors noting any activity at the start point. The survey recorded 5 common pipistrelles, 2 noctules, and a single soprano pipistrelle and serotine between 22:12 and 23:23. The survey concluded at 23:30. (Results shown in Figure 15)

Night-time bat walkover survey 3

- xi The third transect survey was conducted in optimal conditions and in line with the current guidelines at the time of the survey (Collins, 2023). The survey commenced at 19:12 which was the same time as sunset and started with a 30-minute static assessment, with surveyors noting any activity at the start point. Activity was increased during the final survey, with 6 common pipistrelles recorded between 20:37 and 21:38. The survey experienced light rain at the start and end of the survey which was not deemed to be a limitation as activity within the survey was unaffected. The survey was concluded at 22:12. (Results shown in Figure 16)
- xii Bat species identified during the walked bat activity transects were dominated by the same species as detected by the static monitoring. The bat activity recorded during all of the transects was generally considered to be low in relation to habitat suitability and geographical location. These results can be seen in figures 14, 15 and 16. Coloured hotspots within these plans represent bat activity where the bats were heard but not seen.
- xiii The survey evidence has found the majority of bats using the Application Site are common and widespread species (predominantly common pipistrelle). UK Bat Mitigation Guidelines (CIEEM 2023) classifies common pipistrelle, soprano pipistrelle and brown long eared as 'widespread', Myotis species and noctule as 'widespread in many geographies, but not as abundant in all, and serotine, Leisler's, and Nathusius' pipistrelle as 'rarer or restricted distribution'.
- xiv An absence of roosts, and the overall levels of bat activity do not suggest high reliance on the Application Site.
- xv It is noted that within the mitigation guidelines, myotis species are afforded differing conservation values, with species such as daubenton and natterers perceived to be less rare than whiskered and brants. The data analysis conducted within the site which accounts for all survey effort, confirms that a very low population of myotis is present and utilising the site. Myotis calls are extremely difficult to differentiate between the species suggesting that due to the low population and the geographical context in which the Application Site is situated, it is concluded that bats are considered to be of Local nature conservation importance.

3.10 Terrestrial Invertebrates

3.10.1 Desk Study

- i There are seven recent records of notable²⁴ terrestrial invertebrates within the Study Area. The closest / most relevant of these records is associated with a Jersey tiger moth which is approximately 700m north from the Site boundary.

3.10.2 Field Survey

- ii The Site was noted for its low suitability to support a significant notable population of invertebrates due to the predominance of the cropland habitat, with limited floral diversity and intensive management practices. The hedgerows within the Scheme boundary and woodland present outside the Scheme boundary were noted for their higher suitability to support notable invertebrates.
- iii As such, invertebrates within the Application Site are not given a geographic scale of nature conservation importance.

3.11 Other Notable Species

3.11.1 Desk Study

- i There are 14 recent records of other notable species within the Study Area. The closest / most relevant of these records is associated with common toads and hedgehogs which were approximately 400m from the Site boundary.

3.11.2 Field Survey

- ii The Site was noted for its suitability to hedgehogs due to the boundary hedgerows and grassland margins. However, these are likely not impacted by proposals and occurring in low densities.
- iii As such, other notable species within the Application Site are assigned a negligible scale of nature conservation importance.

3.12 Future Baseline

- i The management of the Application Site, which includes regular mowing of the grassland is unlikely to change between the time the surveys were undertaken and the time the development of the Application Site would take place. Therefore, the baseline described above in Sections 3.2 to 3.9 is not expected to change prior to development of the Application Site.

3.13 Summary of Nature Conservation Importance

- i Table 7 summaries the features that have been recorded in the Study Area and their nature conservation importance.

²⁴ Notable terrestrial invertebrates are taken as principal species for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006; any invertebrate listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended); any invertebrate listed under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended); any invertebrate listed in the IUCN Invertebrate Red Data Book (1991); and any invertebrate listed under the Kent BAP.

Table 8. Summary of Nature Conservation Importance

Ecological Feature	Geographical Scale of Nature Conservation Importance
Habitats	Site
Birds	Site
Badger	Site
GCN, Reptiles, Other notable species	Negligible
Bats	Local

4 IMPACT ASSESSMENT, AGREED MITIGATION MEASURES AND SIGNIFICANCE OF RESIDUAL EFFECTS

- i This Section characterises the impacts of the Scheme on IEFs during the construction and operation phases, sets out agreed avoidance and mitigation measures, and assesses the significance of the residual effects (both positive and negative) of the Scheme on these features. Where significant residual effects will occur, appropriate compensation measures are identified to offset those effects. Enhancements agreed by the Applicant are set out in Section 5.
- ii The Applicant has agreed that the general mitigation measures identified in Section 4.1 onwards will be incorporated into the detailed design proposals for the Scheme and implemented as part of the overall development of the Application Site.

4.1 Habitats

4.1.1 Construction Impacts and Mitigation

- i There is a risk that during construction, impacts to trees or woodland bordering the Site could occur through deposition of dust or spillage of pollutants such as engine oil. The woodland to the south contains ancient woodland ground flora. While a full survey of this woodland is disproportionate given that the proposals in the south of the Site are enhancement, precautionary approach should be taken and the woodland assumed as ancient. While no set buffer is recommended as it depends upon the habitat type a minimum 15m is cited as government guidance²⁵. To address this risk, standard measures to prevent impacts from pollution through construction related activities would be implemented and root protection areas adhered to.
- ii Development of the Scheme would result in the loss of 6.5375ha of non-cereal crops and 0.0873ha of modified grassland. Furthermore, the Scheme would result in the full retention of all hedgerows within the Site. These habitats collectively are of Site nature conservation importance and do not support any notable or protected species.
- iii Habitats lost will be replaced by 1.5758ha of modified grassland, 0.8602 ha of other neutral grassland, 0.1316 ha of sustainable urban drainage features, 0.7874ha of vegetated garden and 0.6189 ha of trees within the Application Site as part of the landscape planting. Additional hedgerow planting will also be conducted, with 0.437km of native hedgerow to be created. The net gain requirements of 10% will be delivered within the site with no need for offsetting.

4.1.2 Operation Impacts and Mitigation

- iv No impacts are expected occur to the habitats during the operation of the Scheme.

4.1.3 Residual Effects and Compensation Measures

- v Creation of habitats within the Application Site will deliver a net gain for biodiversity, significant at the Site scale.

²⁵ <https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions#:~:text=Buffer%20zone%20recommendations&text=For%20ancient%20or%20veteran%20trees,15%20times%20the%20tree's%20diameter>. 09/09/2025

4.2 Birds

4.2.1 Construction Impacts and Mitigation

- i Clearance of vegetation during the nesting bird season (taken to be March to August, though with some seasonal and species variations) would risk damaging or destroying active birds' nests. To prevent this, clearance of vegetation would be undertaken outside of the nesting bird season. If this isn't possible, a check of vegetation to be cleared would be undertaken within 24 hrs of the clearance taking place. If any active birds' nests were discovered, they would be left in place with a buffer of vegetation surrounding them until such time as the young had fledged or the nest was no longer active.
- ii A single pair of breeding skylarks were recorded within the Application Site during the survey season. It is understood that the habitats utilised by skylark are due to be lost in full to facilitate the proposed development. As such, it is concluded that suitable mitigation is required. The British Trust for Ornithology (BTO) confirms that the suitable area size for skylark mitigation is between 0.25 – 2ha of suitable habitat (arable land, tussocky grassland etc). It is also confirmed that mitigation for skylarks is to account for a 2:1 ratio to enhance opportunities for the species.
- iii Plots of at least 16m² must be created in suitable areas within the district to mitigate skylark breeding territories.

4.2.2 Operation Impacts and Mitigation

- iv No impacts are expected occur to birds during the operation of the Scheme.

4.2.3 Residual Effects and Compensation Measures

- v No significant residual effect would occur to birds and no compensation is proposed.

4.3 Badgers

4.3.1 Construction Impacts and Mitigation

- i Clearance of vegetation and levelling works within 30m of setts has the potential to disturb badgers in Sett 2 through vibration, noise and tunnel collapse. However, currently no works are anticipated within this area and tree planting is proposed. It is recommended that an updated badger survey is undertaken within 6 months prior to works commencing on site to check for newly created setts.

4.3.2 Operation Impacts and Mitigation

- ii No impacts are expected occur to badgers during the operation of the Scheme.

4.3.3 Residual Effects and Compensation Measures

- iii No significant positive effect would occur to badgers following creation of an orchard to the north of the setts and enhancement of grassland on Site would increase foraging potential for this species.

4.4 Bats

4.4.1 Construction Impacts and Mitigation

- i All hedgerows within the Site are due to be retained, including all trees recorded T1 and T2, both identified with PRF-I. Considering the species recorded which specialise with roosting within trees (noctule, common and soprano pipistrelle), the works within the Site are unlikely to impact on roosting bats, provided a suitable root protection area (RPA) is marked out and adhered to. The retention of the linear habitats will also result in no loss of functional commuting or foraging habitats.
- ii It is also further concluded that the main areas of heightened activity, situated in the southeast of the Site, are not to be developed with habitats recorded at baseline, due to be retained.

iii Indirect impacts to potential roosts in suitable trees could occur during construction as a result of increased noise, vibration and lighting. Therefore, precautionary working practices will be followed to minimise the risk of causing disturbance to bats that could be present in tree roosts at the time. These 'best practice' protocols will be provided within a CEMP and will include the following:

- All retained trees with roosting potential will be protected during construction through the implementation of a sufficient buffer zone (minimum 10m from the root protection zone of the tree), which will be observed via fencing.
- Artificial lighting utilised during construction would have the potential to cause displacement impacts to foraging and commuting bats, where directed towards hedgerows and trees. Efforts will be made to minimise the effects of increased artificial lighting upon retained habitats, particularly the retained hedgerows and trees, and night works will not be undertaken. If avoidance of lighting is not possible, any new lighting will follow the guidance set out in Bats and Lighting in the UK (BCT and ILP, 2023) and will be focused on the works area only and away from retained hedgerows and trees. A sensitive lighting scheme will be implemented and enforced via a CEMP. Lighting proposals will consider the following:
Avoid nocturnal construction

- Avoid lighting where possible- particularly near any retained hedgerow and trees;
- Install lamps and the lowest permissible density;
- Lamps should be positioned to direct light to avoid upward spill onto any green corridors that could be used by commuting bats or features with bat roost potential;
- LED lighting – with no/low UV component is recommended;
- Lights with a warm colour temperature – 3000K or 2700K have significantly less impact on bats;
- Light sources that peak higher than 550nm also reduce impacts to bats; and
- The use of timers and dimmers to avoid lighting areas of the Application Site all night is recommended

4.4.2 Foraging and Commuting Bats

iv The areas and habitats within the Application Site where most bats were observed foraging around linear boundaries (including hedgerows). As the majority of these features will be retained, impacts from the Scheme upon foraging bats will be minimal. However, to minimise disruption to foraging and commuting bats that could be using these habitats during construction, as described above for roosting bats, any artificial lighting (if required) will be carefully positioned away from these areas / habitats.

v

4.4.3 Operation Impacts and Mitigation

vi No impacts are expected occur to bats at operation phases, however, it is determined that a sensitive lighting scheme is incorporated within the design, to ensure no artificial light splay impacts local bat populations following completion of the Scheme. The hedgerows along the north and west boundary, small parcel or woodland to the south are area of passage as confirmed within the transect surveys to the southeast, must have no artificial light splays over the features. The lighting scheme will be required to ensure that any artificial light is incorporated in line with The Institution of Lighting Professionals (ILP) Guidance Note GN08/23.

4.4.4 Residual Effects and Compensation Measures

vii No significant residual effect would occur to bats and no compensation is proposed.

4.5 Cumulative Impact Assessment

i A second site to the east of boundary of the Application Site is likely to also be brought forward by Richborough Estates Limited in due course. This Site is also covered within a separate EclA (RammSanderson, 2025). Both schemes deliver a net benefit for biodiversity. It is further concluded that as additional habitats are to be

created, deemed suitable for bats, including additional tree planting, SUDs and parkland, bats will be compensated for any loss of habitat proposed within the Scheme.

- ii The analysis of the data confirms a regionally important population when considering table 3.3 of the Bat Mitigation Guidelines for the south east of England, with two rarer species recorded. Three of the noted species; Leisler and whiskered, are known to roost in trees, with Whiskered also capable of roosting in buildings. Additional species include Nathusius pipistrelle, which are also known to roost in trees as well as buildings and structures. It is therefore concluded that provided the case study noted within residual effects and compensation measures (Case study 27 of the bat mitigation guidelines) in relation to the trees, suitable compensation will be provided for tree dwelling species. It is also concluded that 25% of the proposed houses must include bat roosting enhancements which are to be integrated within the structures to accommodate other species of bats.

5 BIODIVERSITY NET GAIN

- i The On-site baseline for the Application Site is 12.25 habitat units, 0.19 hedgerow units and 0 watercourse units. Accounting for all the habitat loss and creation detailed above in Section 4.2, the Scheme alone would result in a net gain of 1.49 habitat units, equivalent to a 12.2% gain within the Application Site. A net gain for hedgerows can also be achieved on site, with an additional 0.74 units to be delivered, representing a 385.29% net gain.
- ii Figures 17 and 18 show the biodiversity baseline and proposed in terms of habitat units.
- iii A copy of the Statutory Biodiversity Metric for the Scheme has been submitted as part of the planning application for the Scheme.

6 CONCLUSION

- i This EclA is based on a desk study and ecological surveys undertaken between February and September 2025. The scope of the surveys was based on the EZoI of the Scheme and included an extended Phase 1 habitat survey following UKHabs methodology, habitat condition surveys, dormouse survey, wintering birds surveys, breeding birds surveys, ground level tree assessments of potential bat roost features in trees and a badger survey. The ecological features present within the Survey Area are shown in Figures 2, 3, 4 and 5. Once all relevant available information was obtained, the significance of effects (both positive and negative) on IEFs was assessed.
- ii The Applicant has agreed that the avoidance, mitigation, and compensation measures identified in Section 4 and 5 above will be incorporated into the detailed design proposals for the Scheme and implemented as part of the overall development of the Application Site. The Scheme has maximised opportunities to incorporate and enhance biodiversity within the proposals wherever possible.
- iii Impacts from the construction or operational phases of the Scheme are predicted to result in none of the following significant negative residual effects:
 - Undermine the conservation objectives or condition of designated sites and their features of interest;
 - A change in ecosystem structure and function; and,
 - Threaten the conservation status of undesignated habitats or protected and notable species.
- iv Overall, the Scheme would result in a biodiversity net gain of 10.70% habitat units and 153.21% hedgerow units.
- v Taking avoidance, mitigation and compensation measures into account, the Scheme conforms in respect of biodiversity to The Environment Act 2021 requirement for mandatory biodiversity net gain and the National Planning Policy Framework (NPPF) Section 15 (Conserving and enhancing the natural environment).





Key

- Site Boundary
- c1d8: Other non cereal crops
- g4: Modified grassland
- u1b: Developed land; sealed surface
- h2a6: Other native hedgerow
- g4 203: Mature tree (Medium rural tree)
- Target Notes:
 - TN1: Badger sett



Title: UKHabs Habitat Plan - Site B

Project: Wrotham Road, Meopham

Client: Richborough Estates Limited



Date: 04/11/2025

Fig:

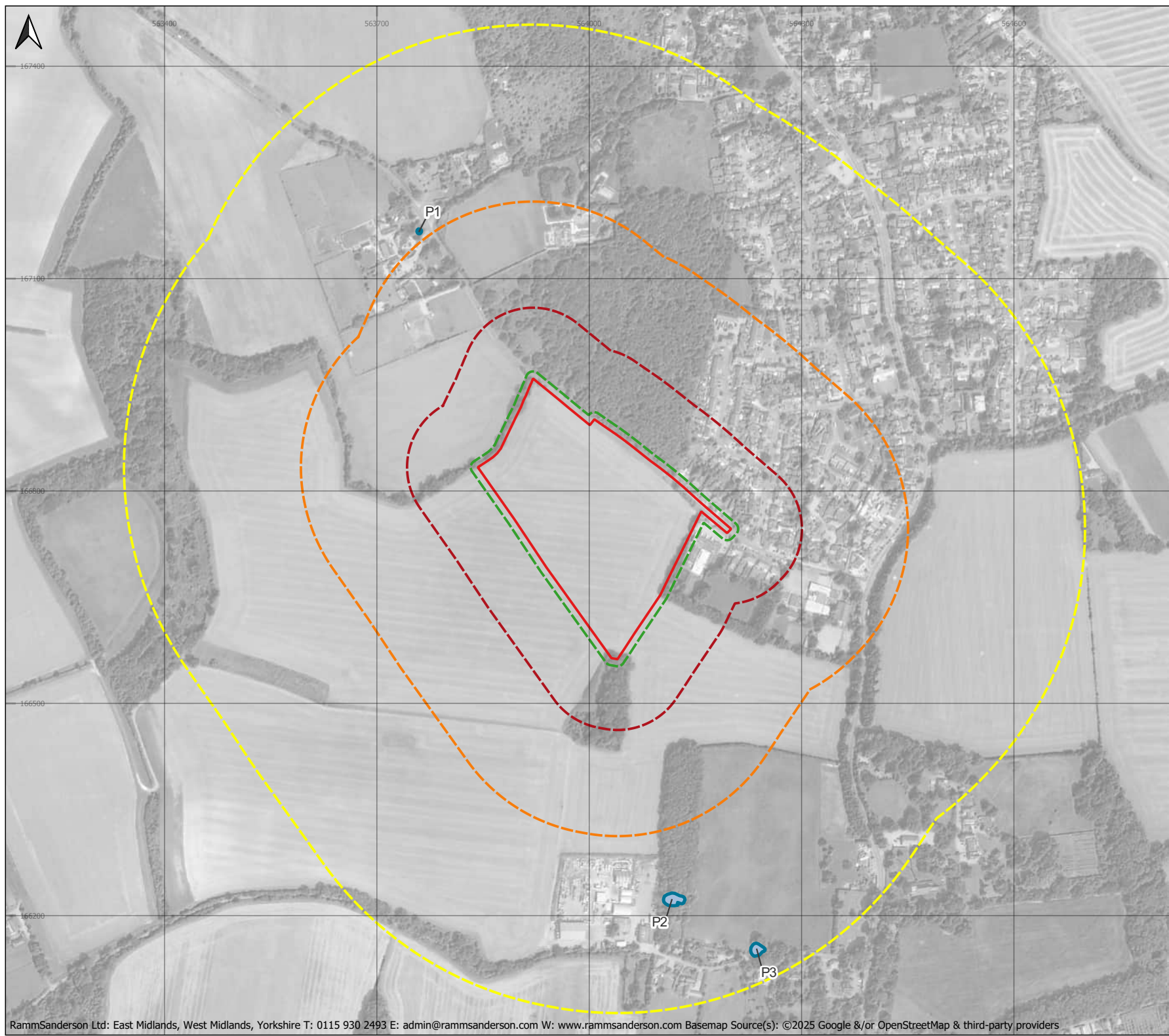
Author: JW

Habitat MMU: 25m²

Linear MMU: 5m (length)

A4 Scale: 1:2500


ID: RSE_8996c_UKH_1125_V2R1



Key

- Site Boundary
- 10m Buffer
- 100m Buffer
- 250m Buffer
- 500m Buffer
- Pond Location

Pond	Area (m2)
P1	33.9
P2	398.7
P3	252.9



Title: Waterbody Plan - Site B

Project: Wrotham Road, Meopham

Client: Richborough Estates Limited


Date: 04/11/2025

Fig:

Author: JW

A4 Scale: 1:7000

ID: RSE_8996c_WBY_1125_V2R1



EPSSG:27700 OSGB36 / British National Grid



Survey Start Time:	08:45
Survey End Time:	10:49
Precipitation:	0%
Cloud:	6 as per Okta scale
Temperature:	2° C
Wind:	1 as per Beaufort scale

Key

- Site Boundary
- Site Boundary (line)
- Offsite Boundary
- Flying in and landing
- Flying away (from being perched)
- Flying over
- Call
- Alarm Call
- Bird Scarer

sp_abbrev	species
B.	Common Blackbird
BH	Black-headed Gull
BT	Blue Tit
C.	Carrion Crow
MG	Maggpie
R.	European Robin
WP	Common Woodpigeon
WR	Wren



Title: Wintering Bird Survey Plan
Survey 1 Site B- 21/01/2025

Project: Wrotham Road, Meopham

Client: Richborough Estates Limited



Date: 05/11/2025 Fig: Author: YH
A4 Scale:1:2800 ID: RSE_8996_WBS1B_1125_V3R1

EPSG:27700 OSGB36 / British National Grid



Survey Start Time:	13:40
Survey End Time:	16:30
Precipitation:	2
Cloud:	8 as per Okta scale
Temperature:	7° C
Wind:	2 as per Beaufort scale

Key

- Site Boundary
- Flying in and landing
- Flying away (from being perched)
- Flying over
- Call
- Alarm Call

sp_abbrev	species
B.	Common Blackbird
BT	Blue Tit
BZ	Common Buzzard
C.	Carrion Crow
GH	Common Grasshopper Warbler
GO	European Goldfinch
GT	Great Tit
HS	House Sparrow
M.	Mistle Thrush
MG	Maggie
PH	Common Pheasant
R.	European Robin
S.	Skylark
SG	Common Starling
ST	Song Thrush
WP	Common Woodpigeon
WR	Wren

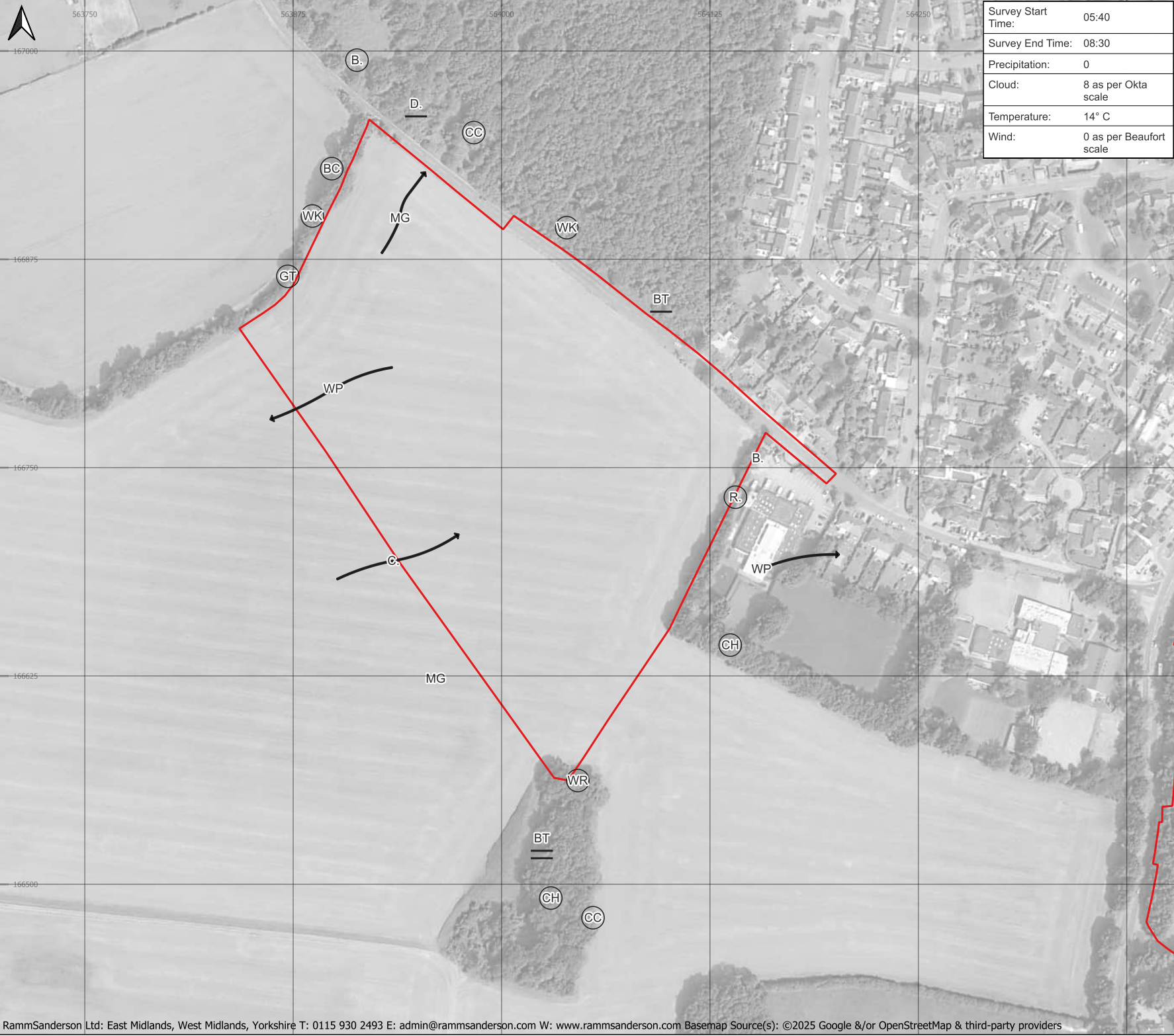
Title: Wintering Bird Survey Plan
Survey 2 Site B - 26/02/2025

Project: Wrotham Road, Meopham

Client: Richborough Estates Limited

Date: 05/11/2025 Fig: Author: YH
A4 Scale: 1:2800 ID: RSE_8996_WBS2B_1125_V3R1

EPSG:27700 OSGB36 / British National Grid



Survey Start Time:	05:40
Survey End Time:	08:30
Precipitation:	0
Cloud:	8 as per Okta scale
Temperature:	14° C
Wind:	0 as per Beaufort scale

Key

(S.)→

—(S.)→

—

==

○

Site Boundary

Flying away (from being perched)

Flying over

Call

Alarm Call

Song

sp_abbrev	species
B.	Common Blackbird
BC	Blackcap
BT	Blue Tit
C.	Carrion Crow
CC	Common Chiffchaff
CH	Chaffinch
D.	Dunnock
GT	Great Tit
MG	Magpie
R.	European Robin
WK	Eurasian Woodcock
WP	Common Woodpigeon
WR	Wren

Title: Breeding Bird Survey Plan - Survey 1 - 30/04/2025

Project: Wrotham Road, Meopham

Client: Richborough Estates Limited

Date: 05/11/2025

Fig:

Author: YH

A4 Scale:1:3000

ID: RSE_8996_BBS1_1125_V3R1

EPSG:27700 OSGB36 / British National Grid



Survey Start Time:	05:00
Survey End Time:	08:30
Cloud:	8 as per Okta scale
Temperature:	8-12° C
Wind:	3 as per Beaufort scale

Key

Site Boundary

Flying over

Two separate birds singing

Call

Alarm Call

Song

Bird Scarers

sp_abbrev	species
B.	Common Blackbird
BC	Blackcap
C.	Carrian Crow
CC	Common Chiffchaff
CD	Eurasian Collared Dove
D.	Dunnoch
GO	European Goldfinch
GT	Great Tit
HS	House Sparrow
MG	Maggpie
NH	Nuthatch
R.	European Robin
S.	Skylark
ST	Song Thrush
WP	Common Woodpigeon
WR	Wren

Title: Breeding Bird Survey Plan - Survey 2 - 15/05/2025

Project: Wrotham Road, Meopham

Client: Richborough Estates Limited

Date: 05/11/2025

Fig:

Author: YH

A4 Scale:1:3000

ID: RSE_8996_BBS2_1125_V3R1


EPSG:27700 OSGB36 / British National Grid



Key

- Site Boundary
- S → Flying away (from being perched)
- Call
- Song

sp_abbrev	species
BC	Blackcap
GT	Great Tit
R.	European Robin
ST	Song Thrush
WP	Common Woodpigeon
WR	Wren

**RammSanderson**

Title: Breeding Bird Survey Plan - Survey 3 - 29/05/2025

Project: Wrotham Road, Meopham

Client: Richborough Estates Limited

Date: 05/11/2025

Fig:

Author: YH

A4 Scale:1:3000

ID: RSE_8996_BBS3_1125_V3R1

EPG:27700 OSGB36 / British National Grid



Survey Start Time:	04:45
Survey End Time:	08:00
Precipitation:	0
Cloud:	2 as per Okta scale
Temperature:	13° C
Wind:	2 as per Beaufort scale

Key

(S.)→


○

Site Boundary

Flying away (from being perched)

Song

sp_abbrev	species
B.	Common Blackbird
CD	Eurasian Collared Dove
GT	Great Tit
R.	European Robin
WR	Wren



Title: Breeding Bird Survey Plan - Survey 4 - 12/06/2025

Project: Wrotham Road, Meopham

Client: Richborough Estates Limited

Date: 05/11/2025

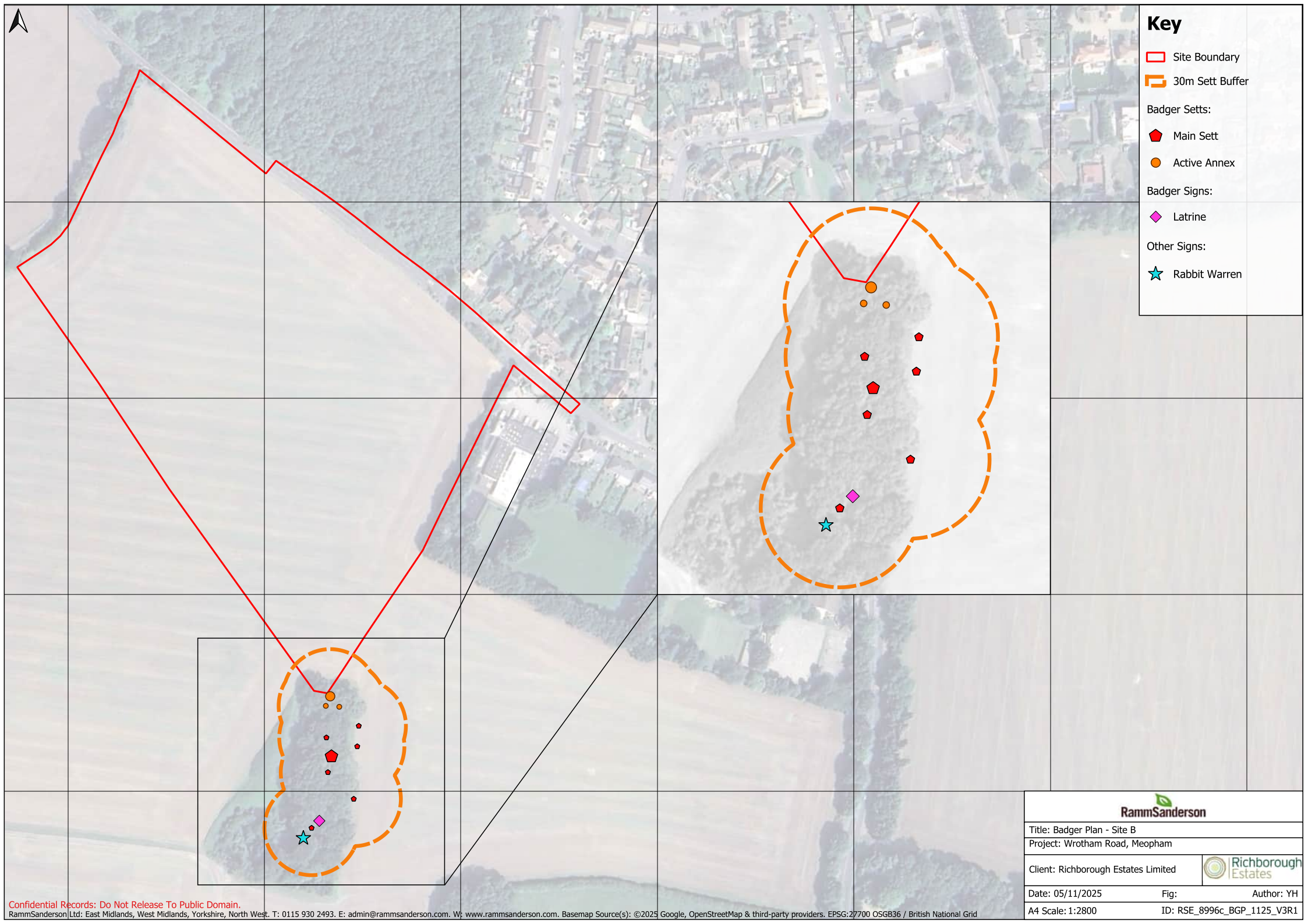
Fig:

Author: YH

A4 Scale:1:3000

ID: RSE_8996_BBS4_1125_V3R1

EPSC:27700 OSGB36 / British National Grid



Key



- Site Boundary
- 30m Sett Buffer
- Badger Setts:
 - Main Sett
 - Active Annex
- Badger Signs:
 - Latrine
- Other Signs:
 - Rabbit Warren

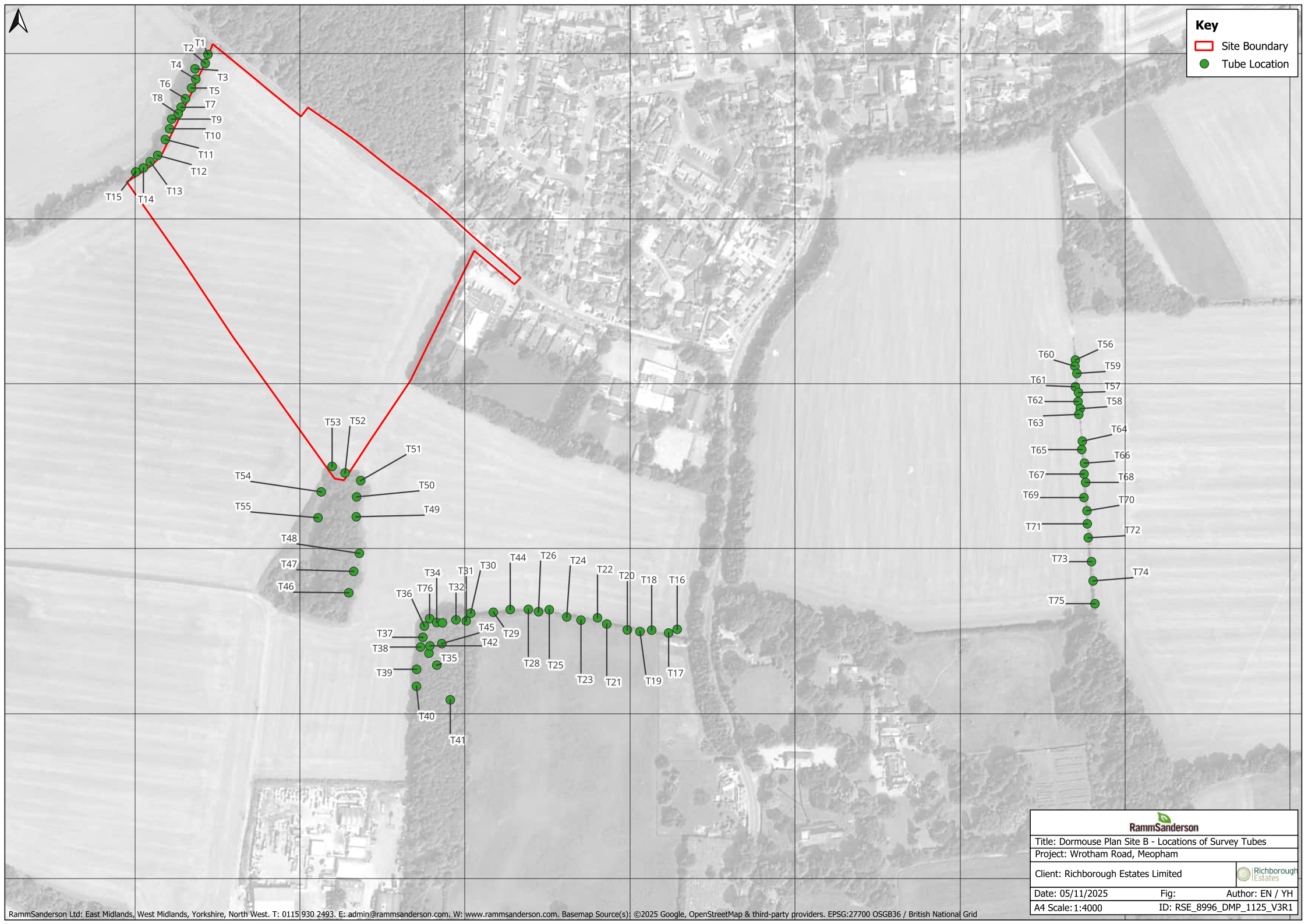




Title: Badger Plan - Site B		
Project: Wrotham Road, Meopham		
Client: Richborough Estates Limited		
Date: 05/11/2025	Fig:	Author: YH
A4 Scale: 1:2800	ID: RSE_8996c_BGP_1125_V3R1	

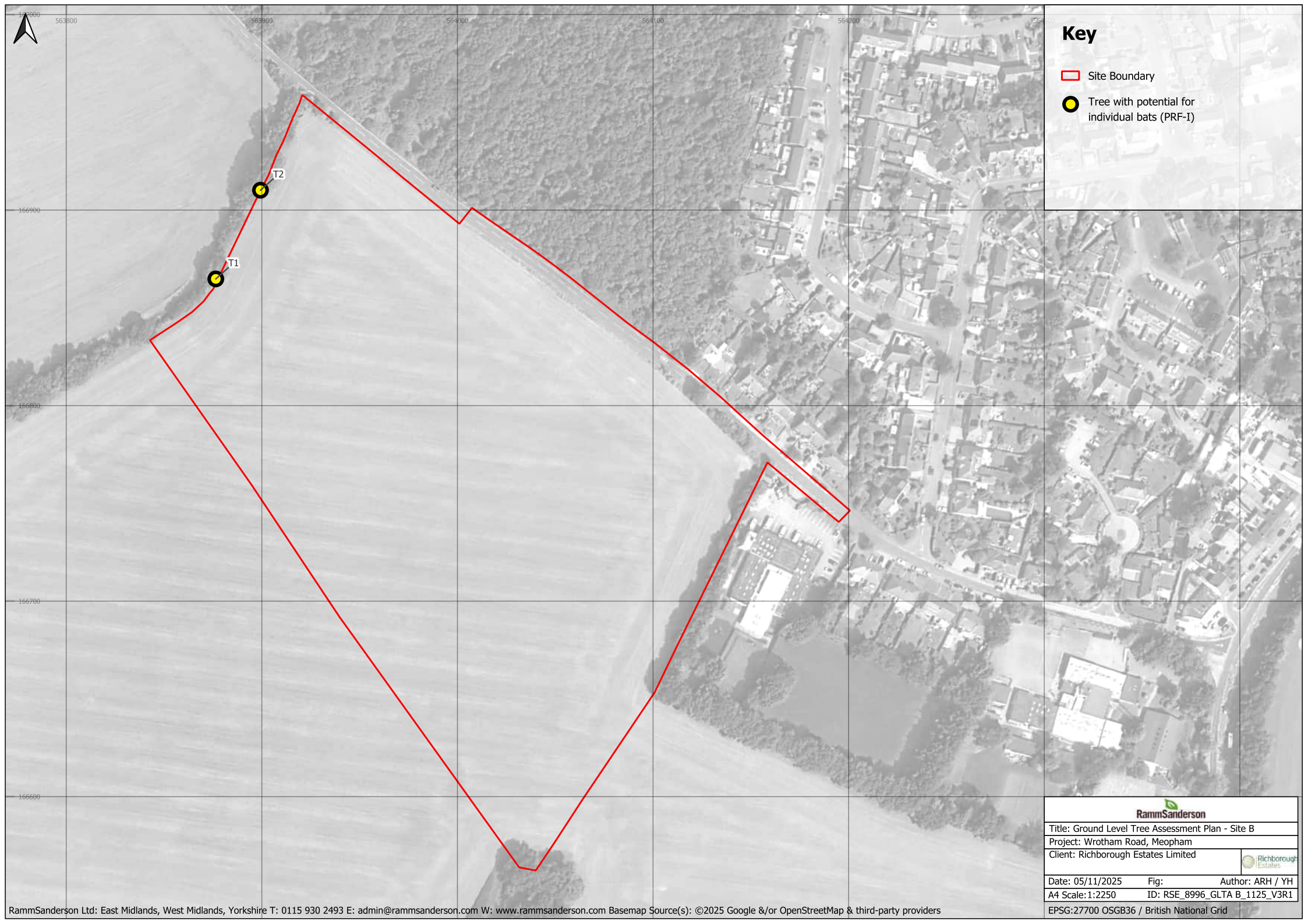


Key



-  Site Boundary
-  Tube Location



		
Title: Dormouse Plan Site B - Locations of Survey Tubes		
Project: Wrotham Road, Meopham		
Client: Richborough Estates Limited		
Date: 05/11/2025	Fig:	Author: EN / YH
A4 Scale: 1:4000	ID: RSE_8996_DMP_1125_V3R1	



Key

-  Site Boundary
-  Tree with potential for individual bats (PRF-I)



Title: Ground Level Tree Assessment Plan - Site B

Project: Wrotham Road, Meopham

Client: Richborough Estates Limited



Date: 05/11/2025 Fig: Author: ARH / YH

A4 Scale: 1:2250 ID: RSE_8996_GLTA B_1125_V3R1

EPSG:27700 OSGB36 / British National Grid



Key

Site Boundary

Bat Static Location

RammSanderson

Title: Bat Static Location Plan

Project: Wrotham Road, Meopham - Site B

Client: Richborough Estates Limited

Date: 05/11/2025

Fig:

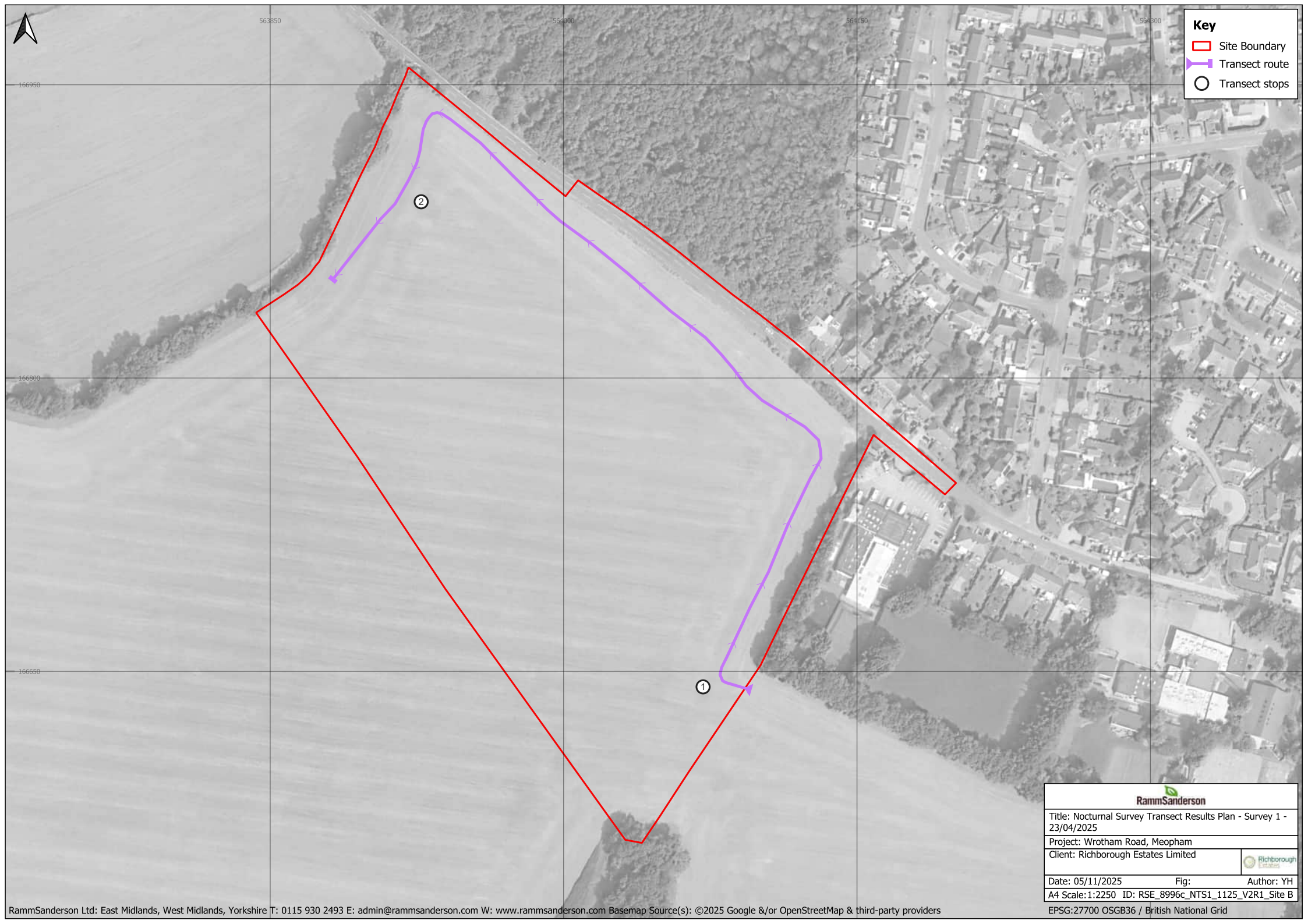
Author: LE

A4 Scale: 1:2500

ID: RSE_8996_BSP_1125_V3R1

EPSG:27700 OSGB36 / British National Grid

Richborough Estates



Key

Site Boundary

Transect route

Transect stops

RammSanderson

Title: Nocturnal Survey Transect Results Plan - Survey 1 - 23/04/2025

Project: Wrotham Road, Meopham

Client: Richborough Estates Limited

Date: 05/11/2025

Fig:

Author: YH

A4 Scale:1:2250 ID: RSE_8996c_NTS1_1125_V2R1_Site B

Richborough Estates




Key

Site Boundary

Transect Route

Serotine



Title: Nocturnal Survey Transect Results Plan - Survey 2 - 09/07/2025

Project: Wrotham Road, Meopham


Client: Richborough Estates Limited

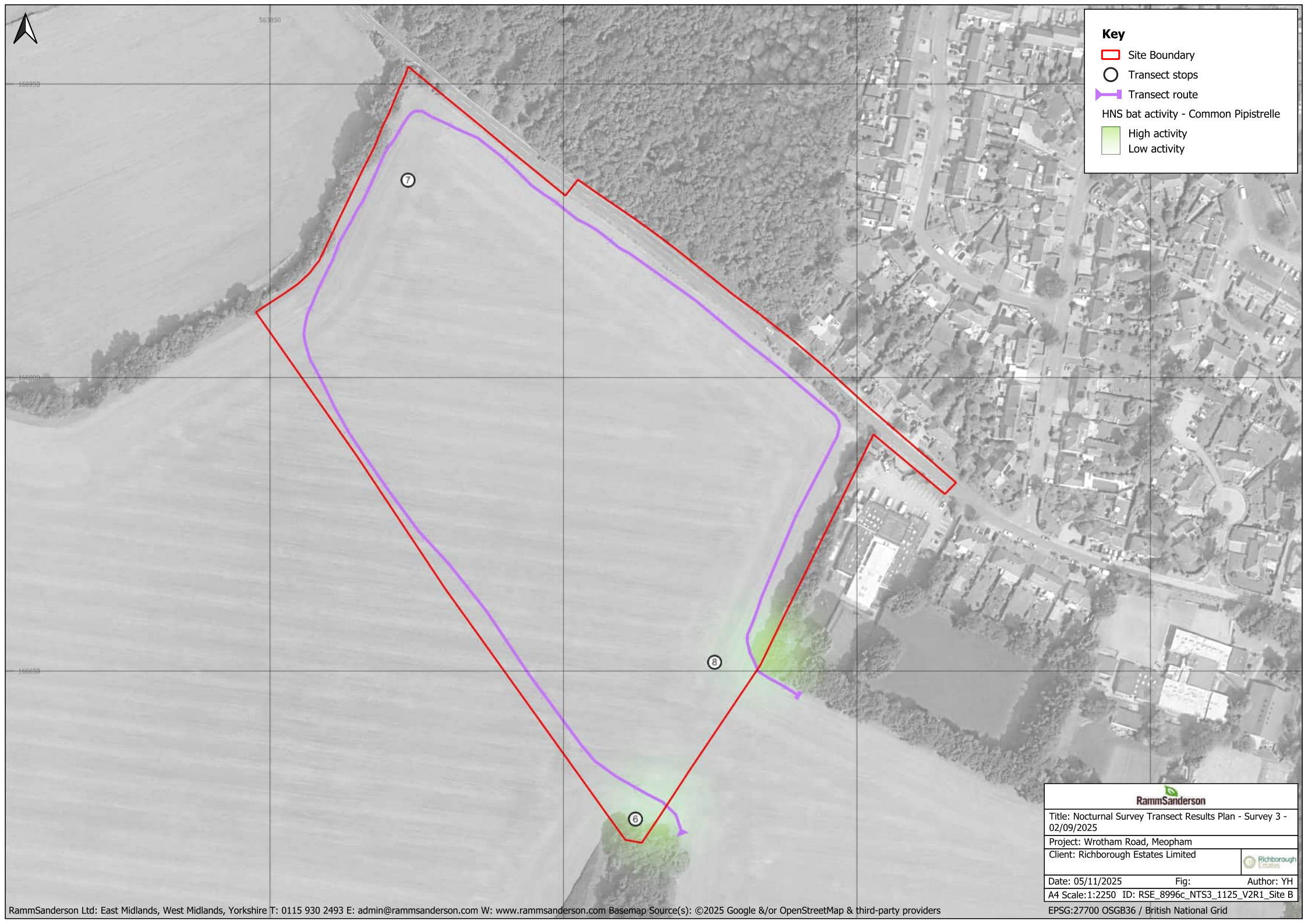
Date: 05/11/2025

Fig:

Author: YH

A4 Scale:1:2250 ID: RSE_8996c_NTS2_1125_V2R1_Site B





Key

Site Boundary

Transect stops

Transect route

HNS bat activity - Common Pipistrelle

High activity

Low activity



Title: Nocturnal Survey Transect Results Plan - Survey 3 - 02/09/2025

Project: Wrotham Road, Meopham

Client: Richborough Estates Limited



Date: 05/11/2025

Fig:

Author: YH

A4 Scale: 1:2250 ID: RSE_8996c_NTS3_1125_V2R1_Site B

EPSG:27700 OSGB36 / British National Grid



Key

Site Boundary

Baseline Habitat Condition

Poor

N/A - Other

Condition Assessment N/A

Baseline Hedgerow Condition

Moderate

Baseline Individual Tree Condition

Good

**RammSanderson**

Title: BIA Baseline Conditions Plan - Site B

Project: Wrotham Road, Meopham

Client: Richborough Estates Limited

Date: 05/11/2025

Fig:

Author: JW


A4 Scale:1:2200


ID: RSE_8996c_BIAB_1125_V1R5








Key


 Site Boundary


 Developed land; sealed surface


 70/30 Split Developed land/Vegetated garden


 Mixed scrub


 Modified grassland


 Other neutral grassland

 Sustainable drainage system

 Native hedgerow

 Proposed Small Urban Tree

 Retained Medium Rural Tree

**RammSanderson**

Title: BIA Proposed Habitat Plan - Site B

Project: Wrotham Road, Meopham

Client: Richborough Estates Limited


Date: 05/11/2025

Fig:

Author: JW

A4 Scale:1:2200

ID: RSE_8996c_BIAB_1125_V1R5



8 REFERENCES

- Chartered Institute of Ecology and Environmental Management (2018). Guidelines on Ecological Impact Assessment in the UK and Ireland. Version 1.2 updated April 2022.
- Wildlife and Countryside Act . (1981 (as amended)). *Schedule 9*.
- Chanin, P. (2003). *Monitoring the Otter Lutra lutra. Conserving Natura 2000 Rivers Monitoring Series No 10*. Peterborough: English Nature.
- Collins, J. (Eds.). (2016). *Bat Surveys for Professional Ecologists: Good Survey Guidelines (Collins, J. Eds. 2016)*, . London: Bat Conservation Trust.
- Dean, M. S. (2016). *The Water Vole Mitigation Handbook (The Mammal Society Guidance Series) Eds Mathews, F. and Chanin, P.* London: The Mammal Society.
- Department of Communities & Local Government. (2021). *The National Planning Policy Framework (NPPF)* .
- English Nature. (2001). *The Great Crested Newt Mitigation Guidelines*. Peterborough.
- English Nature. (2004). *Reptiles: Guidelines for Developers*. Peterborough: English Nature.
- English Nature. (2006). *The Dormouse Conservation Handbook, 2nd edition*.
- Froglife. (1999). *Reptile Survey: An introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10.* . Halesworth.
- Froglife. (2001). *The Great Crested Newt Conservation Handbook*. Halesworth.
- Harris, S. C. (1989). *Surveying Badgers*. The Mammal Society.
- Joint Nature Conservation Committee. (2003). *Herpetofauna Workers Manual*.
- Joint Nature Conservation Committee. (2010). *Handbook for Phase 1 habitat survey - a technique for environmental audit*. Peterborough.
- Multi-Agency Geographic Information for the Countryside (MAGIC) (www.magic.gov.uk) . (n.d.).
- National Parks and Access to the Countryside Act. (1949).
- Natural England. (2004). *An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt (ENRR576)* . Peterborough: <http://publications.naturalengland.org.uk/publication/134002>.
- Natural England. (2009). *Interpretation of 'Disturbance' in relation to badgers occupying a sett*. Peterborough.
- R. S. Oldham, J. K. (2000). Evaluating the suitability of habitat for the great crested newt (*Triturus cristatus*). *The Herpetological Journal*, pp.143-155.
- RammSanderson. (2025). *Preliminary Ecological Appraisal: Wrotham road, Meopham*.
- Scottish Natural Heritage. (2018). *Surveying for Badgers: Good Practice Guidelines. Version 1*.
- Stace, C. E. (2019). *New Flora of the British Isles, 4th Edition*. Cambridge University Press.
- Stanbury, A. E. (2021). The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds*, 114:723-747.
- The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations*. (2019).
- The Hedgerow Regulations*. (1997).
- Ward, D. H. (1994). *The New Rivers and Wildlife Handbook*. Bedfordshire: Royal Society for the Protection of Birds.

APPENDIX 1: RELEVANT LEGISLATION AND PLANNING POLICY

- i The UK is no longer a member of the European Union (EU). EU legislation as it applied to the UK on 31 December 2020 is now a part of UK domestic legislation. EU legislation which applied directly or indirectly to the UK before 11.00 p.m. on 31 December 2020 has been retained in UK law as a form of domestic legislation known as 'retained EU legislation'.
- ii The Secretary of State for the Environment, Food and Rural Affairs and Welsh Ministers have made changes to parts of the Conservation of Habitats and Species Regulations 2017 (referred to as the 2017 Regulations) so that they operate effectively. Most of these changes involve transferring functions from the European Commission to the appropriate authorities in England. All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant and are now referred to as The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (the 2019 Regulations).

Designated Sites

Locally Designated Sites

- iii Local Wildlife Sites are sites with 'substantive nature conservation value'. They are defined areas, identified and selected for their nature conservation value, based on important, distinctive and threatened habitats and species with a region.
- iv They are usually selected by the relevant Wildlife Trust, along with representatives of the local authority and other local wildlife conservation groups.
- v The LWS selection panel, select all sites that meet the assigned criteria, unlike SSSIs, which for some habitats are a representative sample of sites that meet the national standard. Consequently, many sites of SSSI quality are not designated and instead are selected as LWSs. Consequently, LWSs can be amongst the best sites for biodiversity.

Protected Species

Bats /GCN/ Dormice

- vi These species, known as European Protected Species, are protected under Regulation 43 of the 2017 Regulations as amended by the 2019 Regulations. This makes it an offence to deliberately capture, injure or kill an animal; deliberately disturb an animal; or damage or destroy a breeding site or resting place used by an animal.
- vii Deliberate capture or killing is taken to include "accepting the possibility" of such capture or killing. Deliberate disturbance of animals includes in particular any disturbance which is likely a) to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of hibernating or migratory species, to hibernate or migrate; or b) to affect significantly the local distribution or abundance of the species to which they belong.
- viii Where development works are at risk of causing one or more of the offences listed above, a mitigation licence from Natural England can be obtained to facilitate the works that would otherwise be illegal.
- ix These species are also protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb an animal in such a place.

- x Lower levels of disturbance not covered by the Conservation of Habitats and Species Regulations 2017 remain an offence under the Wildlife and Countryside Act 1981 although a defence is available where such actions are the incidental result of a lawful activity that could not reasonably be avoided.

Nesting Birds

- xi All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended), with some species afforded greater protection under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). In addition to the protection from killing or taking that all birds receive, Schedule 1 birds and their young must not be disturbed at the nest.
- xii There are no licensing purposes that explicitly cover development activities affecting wild birds.

Badgers

- xiii Badgers and their setts are protected under the Protection of Badgers Act 1992 (as amended). This makes it an offence to wilfully kill, injure or take a badger; or intentionally or recklessly damage, destroy or obstruct access to a badger sett or disturb a badger in its sett.
- xiv It is not illegal to carry out disturbance activities near setts that are not occupied, i.e. those that do not show signs of current use.
- xv Where required, licences for development activities involving disturbance or sett interference or closure are issued by Natural England. Licences for activities involving watercourse maintenance, drainage works or flood defences are issued under a separate process.
- xvi When assessing the requirement for a licence in respect of development, Natural England (Natural England, 2009) state that badgers are relatively tolerant of moderate levels of noise and activity around their setts, and that a low or moderate level of apparent disturbing activity at or near to badger setts does not necessarily disturb the badgers occupying those setts.
- xvii Licences are normally not granted from December to June inclusive (the badger breeding season) because dependent cubs may be present within setts.

Species and Habitats of Principal Importance for the Conservation of Biodiversity

- xviii Section 40 of the Natural Environment & Rural Communities Act (NERC) 2006 sets out the duty for public authorities to conserve biodiversity in England.
- xix Habitats and species of principal importance for the conservation of biodiversity are identified by the Secretary of State for England, in consultation with Natural England, are referred to in Section 41 of the NERC Act for England. The list, known as the 'England Biodiversity List', of habitats and species can be found on the Natural England web site.
- xx The 'England Biodiversity List' is used as a guide for decision makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the NERC Act 2006 to have regard to the conservation of biodiversity in England when carrying out their normal functions. The habitats and species on the List, are material considerations of planning, where present on an application site.

Planning Policy

National Planning Policy Framework, 2025

- xxi The National Planning Policy Framework (NPPF) (Department of Communities & Local Government, 2025) sets out the Government's planning policies for England and how these are expected to be applied by Local Authorities within their Local Development Frameworks (LDF).

Regarding the NPPF, the most pertinent paragraphs are:

8.c) *“to protect and enhance our natural, built and historic environment, including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy”*

174.d) *“minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures”*

179.b) *“promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.”*

180.a) *“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.”*

180.c) *“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 reasons⁶³ and a suitable compensation strategy exists.”*

BNG Policy

- xxii The National Planning Policy Framework states that “planning decisions should minimise impacts on and provide net gain for biodiversity”. Furthermore, from February 2024, 10% BNG became mandatory under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). This means all relevant developments must achieve at least 10% BNG relative to the baseline biodiversity value of all land within the planning application boundary.

Local Planning Policy

- xxiii The Gravesham Local Plan Core Strategy adopted in September 2014 sets out the following relevant policies:
- xxiv **Policy CS12: Green Infrastructure** – Section 5.7.24 states “There will be no net loss of biodiversity in the Borough, and opportunities to enhance, restore, re-create and maintain habitats will be sought” Section 5.7.25 states “Where a negative impact on protected or priority habitats/species cannot be avoided on development sites and where the importance of the development is considered to outweigh the biodiversity impact, compensatory provision will be required either elsewhere on the site or off-site, including measures for ongoing maintenance.”
- xxv **Policy CS19: Development and Design Principles** – Section 5.15.14 states “New development will protect and, where opportunities arise, enhance biodiversity and the Borough’s Green Infrastructure network.

Local Biodiversity Action Plans

- xxvi The Kent Biodiversity Strategy aims to deliver, over a 25- year period, the maintenance, restoration and creation of habitats that are thriving with wildlife and plants and ensure that the county’s terrestrial, freshwater, intertidal and marine environments regain and retain good health (KCC, 2020). The Strategy has identified 17 priority habitats and 13 priority species that Kent can play a significant part in the restoration of. It has also identified a handful of species that can act as indicators of the health of our ecosystems.

APPENDIX 2: METHODOLOGY

Desk Study

Background Records Search

- xxvii The preliminary ecological assessment includes a desk study to obtain background records relevant to a Site and the Scheme. The data obtained provides contextual information for the scope of field surveys, to aid the evaluation of field survey results, and to provide supplementary information where complete field survey coverage is not possible.
- xxviii The Study Area is dependent upon the nature, timing and scale of the Scheme, as well as the location of the Site and the surrounding landscape. These variables all contribute to what is referred to as the Zone of Influence (Zol) of the Scheme, which is the area over which ecological features may be affected by biophysical changes because of the works and associated activities.
- xxix In 2025 the Kent and Medway Biological records Centre was contacted to obtain the following ecological data:
- Records of non-statutory designated sites within 1 km of the Site boundary.
 - Records of legally protected and notable species (fauna and flora) within 1 km of the Site boundary, including Species of Principal Importance for the Conservation of Biodiversity listed under Section 41 of the Natural Environment & Rural Communities Act 2006 in the England Biodiversity List²⁶.
- xxx The Multi-Agency Geographic Information for the Countryside (MAGIC) (www.magic.gov.uk) website was reviewed for the following information:
- Designated sites of nature conservation importance (statutory sites only) within 1 km of the Site; and,
 - Notable habitats within 1 km of the Site, these being areas of ancient woodland and 'Habitats of Principal Importance for the Conservation of Biodiversity' included in the England Biodiversity List.

Great Crested Newt Pond Search

- xxxi Ordnance Survey maps and the Where's the Path website (<https://wtp2.appspot.com/wheresthepath.htm>) have been used to identify the presence of water bodies within 500 m of the Site boundary, in order to help establish if the land within and immediately surrounding the Site could be used by great crested newts. This species can use suitable terrestrial habitat up to 500 m from a breeding pond (English Nature, 2001), though there is a notable decrease in great crested newt abundance beyond 250 m from a breeding pond (Natural England, 2004).

Field Survey

- xxxii The preliminary ecological assessment includes a walkover survey of the Survey Area (all land within the Site and adjacent to), broadly following the Phase 1 habitat survey methodology as set out in Joint Nature Conservation Committee guidance (Joint Nature Conservation Committee, 2010). This survey method records information on habitat types and is 'extended' to record any evidence of and potential for protected or notable species to be present. Plant names recorded during the survey follow (Stace, 2019).

²⁶ Section 40 of the Natural Environment & Rural Communities Act 2006 requires that very 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. The Secretary of State has drawn up, in accordance with Section 41 of the Act and in consultation with Natural England, a list of habitats and species of principal importance for the conservation of biodiversity in England that is known as the England Biodiversity List

xxxiii During the walkover survey, the following protected or notable species are considered:

- **Badger:** the survey involves searching for signs of badger activity including setts, tracks, snuffle holes and latrines, following the methodology detailed in (Scottish Natural Heritage, 2018) and (Harris, 1989).
- **Bats:** the survey involves searching for potential roosting sites for bats within trees and structures (such as buildings, bridges or underground features such as mines) and categorising the potential of those trees or structures to support roosting bats (negligible to high, or confirmed roost), in accordance with Bat Conservation Trust (BCT) (Collins, J. (Eds.), 2016) guidance.
- **Birds:** the survey involves assessing the potential of habitats within the Survey Area to support breeding, wintering or migrating birds, either individually notable species or assemblages of both common and rarer species;
- **Great crested newt:** the survey involves assessing the potential of habitats within the Survey Area to support great crested newt, following English Nature (English Nature, 2001) and Froglife (Froglife, 2001) guidance;
- **Reptiles:** the survey involves assessing the potential of habitats within the Survey Area to support reptiles (typically adder, grass snake, common lizard and slow worm only, though in some locations and habitat types (most notably heathland) may also include smooth snake and sand lizard), following Froglife (Froglife, 1999) and JNCC (Joint Nature Conservation Committee, 2003) guidance;
- **Notable species of invertebrate:** the survey involves assessing the potential of habitats within the Survey Area to support notable species of invertebrates, both terrestrial and aquatic (including white-clawed crayfish);
- **Protected or Notable species of plants:** the survey involves recording protected or notable plant species;
- **Other notable species:** the survey involves assessing the potential of habitat within the Survey Area to support other Notable Species, such as hedgehog, brown hare, polecat or common toad;
- **Non-native invasive plant species:** the survey involves recording evidence of the presence of invasive plants listed on (Wildlife and Countryside Act, 1981 (as amended)) and subject to strict legal control.

Tree and Building Bat Roost Suitability Assessment

xxxiv Buildings, trees and other structures were graded as to their suitability for supporting roosting bats using (Collins, J. (Eds.), 2023), an extract of which is provided interpreted in the table below.

Table 9: Criteria for bat roost potential assessment of trees

Roost Potential	Description	Surveys Required (Trees)
Confirmed roost	Evidence of roosting bats found during initial daytime inspection or known bat roost present.	3 – including 1 dawn as a minimum or all dusk surveys supplemented by night vision aids (May to September).
PRF-M	PRF is suitable for multiple bats and therefore may be used by a maternity colony.	Or: conduct Advanced Licence Bat Survey Techniques (ALBST) for larger schemes and / large numbers of trees and PRF-Ms. Winter: 2 surveys / Assume presence and mitigate – December to February.
PRF-I	PRF is only suitable for individual bats or very small numbers of bats due to either size or lack of suitable surrounding habitat.	Compensate for all PRF-Is prior to impacts. Precautionary Mitigation of Works for works. In some instances, may require further survey depending on context.
Negligible	No obvious features likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion. Risk considered insignificant.	None 1 Survey - all surveyors using Night Vision Aids (NVAs)

Hazel Dormouse Presence / Likely Absence Survey

xxxv A habitat quality assessment for dormice has been undertaken in line with Wells, D., Chanin, P. & Gubert, L. (2025) Hazel Dormouse Mitigation Handbook. This assessment takes into consideration the species diversity and suitability for dormice, structural complexity of habitat, abundance and distribution of bramble, habitat management regimes, habitat fragmentation, habitat connectivity and dispersal barriers. The habitat assessment results in poor/fair habitat quality or good/excellent habitat quality. For certain survey methodologies the result of the habitat assessment will impact the survey effort required. There are three methodologies which can be used to prove absence.

Nest Tubes

xxxvi As per the recommended protocol for sites where habitat quality is poor/fair for dormice, a minimum of 100 tubes have been deployed for a full season (from April/May until November) and have been checked monthly.

xxxvii As per the recommended protocol for sites where habitat quality is good/excellent for dormice, a minimum of 50 tubes have been deployed based on the required minimum survey effort depending on the month the tubes were deployed as stated in the table below:

Table 10: Hazel Dormouse Nest Tubes Survey Effort

Tubes installed	Number of checks at monthly intervals	End date
April	6	September
May	5	
June	4	
July	3	
August	3	October
September	3	November
October	9	September following year (restarted in the April)

Biodiversity Accounting

xxxviii The biodiversity net gains assessment involves making a comparison between the biodiversity value of habitats present within the Site prior to a development (i.e. the 'baseline') and the predicted biodiversity value of habitats following the completion of the Scheme (i.e. 'post development'). The comparison is undertaken in terms of 'biodiversity units', with a 'biodiversity metric' providing the mechanism to allow biodiversity values to be calculated and compared.

xxxix The metric assesses and generates separate outputs for area-based habitats and linear based habitats (with rivers reported separately to other habitats like hedgerows). A development cannot claim to achieve net gain until biodiversity net gains are predicted across all area-based, linear based and river based habitats.

xl The calculation for area-based and linear (non-river) habitats calculates biodiversity units as follows:

- Before Works = Distinctiveness Score x Condition Assessment x Area/Length x connectivity x strategic significance

- After Works = ((Distinctiveness Score x Condition Score x Area/ Length x connectivity x strategic significance) / Time to Target Condition) / Difficulty of Creation/Restoration

xli The five factors are determined as set out below:

- Distinctiveness Score – High, Medium or Low, based on UK habitat classifications.
- Condition Score – Good, Fairly good, Moderate, Fairly poor or Poor, based on habitat condition assessment.
- Area/Length – hectares (ha)/ length (km) of habitat type.
- Connectivity – High, Medium and Low.
- Strategic significance – High (Within area formally identified in local strategy), Medium (Location ecologically desirable but not in local strategy) and Low (Area/compensation not in local strategy/ no local strategy).
- Time until target condition – time period (in years) until the target condition will be achieved.
- Difficulty of creation/restoration – a score applied to account for risk associated with creating/restoring different types of habitat.

Limitations

xlii The aim of a desk study is to help characterise the baseline context of a proposed development and provide valuable background information that would not be captured by a single site survey alone. Information obtained during the course of a desk study is dependent upon people and organisations having made and submitted records for the area of interest. As such, a lack of records for a particular habitats or species does not necessarily mean that the habitats or species do not occur in the study area. Likewise, the presence of records for particular habitats and species does not automatically mean that these still occur within the area of interest or are relevant in the context of the proposed development. An ecological survey represents a 'snapshot' in time of the ecological condition of a Site. The ecological character of a Site can change substantially throughout both the course of a year, and from year to year impacting on the extent and quality of habitats potential to support protected species. Deployed bat static detectors failed to record the required 5 nights of data during all three recording periods for static 1, collecting from dawn until dusk in April, the two nights in July, and one night in September. Due to these technical issues, the amount of survey data is not as complete as would be the ideal. Nevertheless, as monitoring was performed for an extended period of time (April to September inclusive), with static 2 collecting 5 nights for each recording period, in addition to the activity transects, it was considered that the amount of bat survey data obtained across the monitoring period was sufficient to draw adequate conclusions on the species and general levels of bat activity within the Application Site.

Table 11: Survey Dates

Survey Type	Dates ²⁷
Badger	24/04/2025
Ukhab/conditions assessment	26/02/2025, 03/07/2025, 04/07/2025
Winter bird surveys	21/01/2025, 26/02/2025
Ground level tree assessments	03/07/2025, 04/07/2025

²⁷ (undertaken in suitable conditions unless stated in limitations section)

Hazel dormouse presence/absence	24/04/2025, 29/05/2025, 26/06/2025, 17/07/2025, 29/08/2025, 17/09/2025
Breeding bird surveys	30/04/2025, 15/05/2025, 29/05/2025, 12/06/2025
Bat activity transects	23/04/2025, 09/07/2025, 02/09/2025
Bat crossing point surveys	14/08/2025, 18/09/2025

APPENDIX 3: Survey Results

Bat Tree Assessment

Table 12: Summary of Ground Level Tree Assessment Results



Feature	Species	Description	Grading	Photographs
T1	Ash	Deadwood in canopy	PRF-I	
T2	Ash	Deadwood in canopy and loose ivy cover	PRF-I	

Table 13: Static Monitoring Results Static 1

Static dates	Common Pipistrelle	Soprano Pipistrelle	Noctule	Leisler's	Myotis Sp.	Serotine	Brown long-eared	Total No. of passes	Total no. of nights	Average passes per night (all species)
23/04/2025 - 27/04/2025	100	1		3				104	N/A	N/A
17/07/2025 - 22/07/2025	579	11	3	20	2	53	4	672	2	336
02/09/2025 - 09/09/2025	329				1			330	1	330
Total passes / species	1008.00	12.00	3.00	23.00	3.00	53.00	4.00	1002	3	334
Average passes/ species	336.00	4.00	1.00	7.67	1.00	17.67	1.33			
% of bat passes / species	100.60	1.20	0.30	2.30	0.30	5.29	0.40			

Table 14: Static Monitoring Results Static 1

Static dates	Common Pipistrelle	Soprano Pipistrelle	Nathusius's'	Noctule	Leisler's	Myotis Sp.	Serotine	Brown long-eared	Total No. of passes	Total no. of nights	Average passes per night (all species)
23/04/2025 - 27/04/2025	12		1		33	1			0	5	0
17/07/2025 - 22/07/2025	901	10		14	120	1	190	7	1243	5	248.6
02/09/2025 - 09/09/2025	109	1			6	6	1		123	5	24.6
Total passes / species	1022.00	11.00	1.00	14.00	159.00	8.00	191.00	7.00	1366.00	15.00	91.07
Average passes/ species	68.13	0.73	0.07	0.93	10.60	0.53	12.73	0.47			
% of bat passes / species	74.82	0.81	0.07	1.02	11.64	0.59	13.98	0.51			

BIODIVERSITY IMPACT ASSESSMENT

Table 15: Habitat Descriptions

UK Hab Description	Area (hectares) / Baseline Biodiversity Units	Condition Assessment	Habitat Condition Comments
Non-Cereal Crops	5.9237ha / 11.85 units	No Condition Assessment Applicable	The arable field covering the majority of the site is planted with non-cereal crops. Possible brassica spp. The condition of the habitat defaults to condition assessment N/A. The habitat is not strategically significant.
Modified Grassland	0.1013ha / 0.20 units	Poor	<p>Northwest grassland achieves:</p> <p>B. Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.</p> <p>C. Some scattered scrub (including bramble <i>Rubus fruticosus</i> agg.) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.</p> <p>D. Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.</p> <p>E. Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).</p> <p>F. Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.</p> <p>G. There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).</p> <p>Southern grassland achieves:</p> <p>C. Some scattered scrub (including bramble <i>Rubus fruticosus</i> agg.) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.</p> <p>F. Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.</p> <p>G. There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).</p>

UK Hab Description	Area (hectares) / Baseline Biodiversity Units	Condition Assessment	Habitat Condition Comments
			In the absence of a Local Nature Recovery Strategy for Kent and Medway, the local plans and policies for Gravesham Borough Council have been reviewed and the habitat isn't within a strategic site, hence strategic significance.
Developed Land, Sealed Surface	0.2135ha / 0.00 Units	No Condition Assessment Applicable	<p>Developed land; sealed surface present to the north of the site comprising a road.</p> <p>The condition of the habitat defaults to N/A - Other.</p> <p>The habitat is not strategically significant.</p>
UK Hab Description	Area (Linear KM) / Baseline Biodiversity Units	Condition Assessment	Habitat Condition Comments
Native Hedgerow	0.048km / 0.19 units	Moderate	<p>H1: Native hedgerow located along the northern boundary of the eastern parcel. It has been assessed as poor condition as it achieves the following criteria in the condition assessment:</p> <p>B1. Gap - hedge base - Gap between ground and base of canopy <0.5m for >90% of length</p> <p>D1. Invasive and neophyte species - >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA) and recently introduced species.</p> <p>In the absence of a Local Nature Recovery Strategy for Kent and Medway, the local plans and policies for Gravesham Borough Council have been reviewed and the habitat isn't within a strategic site, hence strategic significance.</p>

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Area habitat units</i>	1.49
	<i>Hedgerow units</i>	0.74
	<i>Watercourse units</i>	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Area habitat units</i>	12.20%
	<i>Hedgerow units</i>	385.29%
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	Yes ✓	