APPENDIX 8.1: WEST OF IFIELD – BIODIVERSITY NET GAIN ASSESSMENT REPORT

Homes England

The Housing and Regeneration Agency

West of Ifield, Crawley
Biodiversity Net Gain Report

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Version 1 - Planning submission

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Turner and Townsend Project Management Ltd

On behalf of

Homes England

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WEST OF IFIELD
BIODIVERSITY NET GAIN ASSESSMENT REPORT

RAMBOLL Bright ideas. Sustainable change.

WEST OF IFIELD

BIODIVERSITY NET GAIN ASSESSMENT REPORT

Project name	**Land West of Ifield**
Project no.	**1620007949**
Recipient	**Turner and Townsend Project Management Ltd**
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1	26/05/2023	EK/JM/KL	MN	MR	First Issue to Client (Outline components only)
2	25/06/2025	EK/AF	MN	MR	Second Issue to Client (considering hybrid application)
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EXECUTIVE SUMMARY

Ramboll UK Limited ('Ramboll') was commissioned by Turner and Townsend Project Management Ltd (the 'Client'), on behalf of Homes England (the 'Applicant') to undertake a Biodiversity Net Gain Assessment and associated River Condition Assessment in relation to the proposed development plans for the Land West of Ifield, Ifield, West Sussex (the 'Site') using the Statutory Biodiversity Metric of July 2024. This assessment is required to accompany a Hybrid Planning Application, part outline and part full planning application, for a phased, mixed-use development of the Site (the 'Proposed Development'). The Site is located at Ordnance Survey (OS) grid reference TQ 23679 36673.

Biodiversity Net Gain is a process whereby development leaves biodiversity in a measurably better state than before and it is a planning policy requirement in England under the National Planning Policy Framework (2024). BNG is a legal requirement in England with the Environment Act (2021) setting out a mandatory 10% net gain in biodiversity for new development.

The aim of this report is to provide the results of the BNG assessment in relation to the Site including the associated construction works and landscape plans for the Proposed Development. This has been achieved through calculating the biodiversity change as a result of the Proposed Development in terms of net loss, no net loss or a net gain and including recommendations to assist the Proposed Development to minimise biodiversity impacts and maximise biodiversity outputs.

An extended Phase 1 habitat survey was undertaken by Arcadis in 2018/19. Ramboll reviewed the work by Arcadis and subsequent studies, update habitat surveys and a Habitat Condition Assessment were undertaken in August and September 2020. An extended UKHab survey of the Site was undertaken by Ramboll in August 2022. Additional site visits were conducted by Ramboll in April 2023 in order to map additional habitats and undertake a Habitat Condition Assessment following an update to the Site boundary. A second update extended UKHab survey of the whole Site was undertaken in June 2024 to ensure the habitat survey was valid for the submission of the hybrid application. Furthermore, additional Site visits were undertaken in March 2025 to confirm habitats and where necessary, undertake habitat condition assessments in some areas. The data from these surveys was used to inform this BNG assessment.

Post-development habitats have been based upon the final landscape design for the detailed component as well as the designs for the outline component. The BNG assessment for the detailed component was completed by Arcadis in June 2025 (see Appendix 8). The BNG assessment for the outline component has been completed by Ramboll in June 2025 and the results are provided in this report. The results of the detailed BNG assessment completed by Arcadis have been combined with the results of the outline BNG assessment to provide an overall biodiversity score for the whole Site.

A River Condition Assessment, comprising Modular River Survey field survey techniques and a desk study comprising a river type assessment was undertaken at the Site by Ramboll in March and April 2023 in order to assess the watercourses baseline. The River Condition Assessment was updated in March 2025 and the results are presented in this report.

Based on the current landscape designs and future aspirations of the Site with recommendations from a suitably qualified ecologist, it would be possible to achieve 12.70% net gain (107.40 Biodiversity Units) for area-based habitats. A -3.42% net loss (-2.09 Hedgerow Units) and a -0.46% net loss (-0.37 Watercourse Units) for rivers have been calculated based on the current detailed landscape designs and outline parameter plans. The creation of 1.2 km of species-rich native hedgerow and 2.2 km of new ditch within the outline component, both in moderate condition, would be sufficient to reach a 10% net gain for hedgerows and rivers, respectively, and to satisfy trading rules. This should be reasonably feasible given the area of the outline component. If, at detailed design stage, a greater length of ditches and hedgerows/lines of trees can be retained then the requirements for new ditches and hedgerows could be adjusted accordingly to achieve a 10% BNG.

1. INTRODUCTION

1.1 Background

Ramboll UK Limited ('Ramboll') was commissioned by Turner and Townsend Project Management Ltd (the 'Client'), on behalf of Homes England (the 'Applicant') to undertake a Biodiversity Net Gain (BNG) Assessment and associated River Condition Assessment (RCA) in relation to the proposed development plans for the Land West of Ifield, Ifield, West Sussex (the 'Site'; see Site Boundary Plan, Appendix 1) using the Defra Statutory Biodiversity Metric[1]. This assessment is required to accompany a Hybrid Planning Application (HPA), part outline and part full planning application, for a phased, mixed-use development of the Site (the 'Proposed Development' as outlined below in Section 1.4). The Site is located at Ordnance Survey (OS) grid reference TQ 23679 36673, within the administrative boundary of Horsham District.

The HPA includes a detailed development element with respect to Phase 1 for which no matters are reserved (the 'Detailed Component'), and outline development elements for the remainder of the Site, with all matters reserved (the 'Outline Component'). The Detailed Component and Outline Component together are referred to as the Proposed Development. The BNG assessment for the Detailed Component has been completed by Arcadis (UK) Limited ('Arcadis') (see Appendix 8) and the BNG assessment for the Outline Component has been completed by Ramboll. The detailed and outline BNG assessments have been combined to provide an overall BNG assessment for the Proposed Development.

1.2 Biodiversity Net Gain

BNG is a process whereby development leaves biodiversity in a measurably better state than before and is a policy requirement under the National Planning Policy Framework (NPPF; 2024)[2]. BNG became a legal requirement in England in February 2024[3], by virtue of the Environment Act (2021)[4] setting out a mandatory 10% net gain in biodiversity for new development.

The BNG process is governed by a set of UK good practice principles (2016)[5] along with industry guidance, which outlines the practical implementation of the principles (2019)[6]. The key principle is the application of a mitigation hierarchy, which sets out that development should first avoid biodiverse habitats, then mitigate/minimise impacts upon habitats, then restore/reinstate habitats. As a last resort, once the mitigation hierarchy has been maximised on Site, the project may use biodiversity offsetting to compensate for any residual biodiversity impacts resulting from the project.

The principles require use of a Metric (e.g. Defra Statutory Biodiversity Metric), to assess and quantify net biodiversity change. Applying this process enables transparent reporting on biodiversity outputs to demonstrate delivery against the current legislative and planning policy requirements for BNG.

A requirement of the BNG assessment, when watercourses are present on or within 10m of the Site, is the RCA utilising the Modular River Survey[7] (MoRPh) field survey techniques and associated river

1 Department for Environment Food & Rural Affairs, 2024. The Statutory Biodiversity Metric. Accessed from: https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides

2 Ministry of Housing, Communities & Local Government, 2024. National Planning Policy Framework (NPPF), last updated 12 December 2024. Accessed from: National Planning Policy Framework - GOV.UK

3 Department for Environment Food & Rural Affairs, 2021. Environment Act 2021. Accessed from: https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted

4 Department for Environment Food & Rural Affairs, 2021. Environment Act 2021. Schedule 14. Accessed from: https://www.legislation.gov.uk/ukpga/2021/30/schedule/14/enacted

5 CIEEM, CIRIA, IEMA, 2016. Biodiversity Net Gain: Good practice principles for development. Accessed from: https://cieem.net/wp-content/uploads/2019/02/Biodiversity-Net-Gain-Principles

6 CIEEM, CIRIA, IEMA, 2019. Biodiversity Net Gain: Good practice principles for development. A practical guide. Accessed from: https://cieem.net/wp-content/uploads/2019/02/C776a-Biodiversity-net-gain.-Good-practice-principles-for-development.-A-practical-guide-web

7 Gurnell, A.M., England, J., Shuker, L.J. and Wharton, G., (2022) The MoRPh Survey: Technical Reference Manual 2022 Version, Available at: https://modularriversurvey.org/wp-content/uploads/MoRPh-Manual-ver-14_Oct22.pdf

type desk study. This assessment is required on all development sites with watercourses on-Site and within 10m of the Site boundary, to evaluate the impact of the development by utilising the Biodiversity Metric and to inform and prescribe requirements for mitigation. Furthermore, mapping and assessment of riparian zone encroachment and watercourse encroachment of each watercourse is required following the Defra Statutory Biodiversity Metric: User Guide[8].

1.3 Objectives

The aim of this report is to present the results of the BNG assessment, including RCA, in relation to the Site, including both detailed (full) and outline elements as described in Environmental Statement Chapter 2: Proposed Development Description (the 'Detailed and Outline Components'), and the associated construction works and landscape plans for the Proposed Development.

The structure and content of the report is based on current BNG good practice and reports on the following:

- The biodiversity baseline of the Site;
- The predicted post-development biodiversity of the Site considering both the Detailed Component and the Outline Component; and
- The calculation of overall biodiversity change considering both the Detailed Component and the Outline Component.

The objectives of this report are to:

- Calculate the biodiversity change as a result of the Proposed Development, including both the Detailed Component and Outline Component, in terms of net loss, no net loss or a net gain; and
- Include recommendations to assist the Proposed Development to minimise biodiversity impacts and maximise biodiversity outputs.

The report is supported by the following appendices:

- Appendix 1: Figures
  - Figure 1.1.1 Baseline UKHab Habitat Map - Outline Component;
  - Figure 1.2.1 – 1.2.4 Baseline UKHab Habitat Map with Habitat Reference Numbers - Outline Component;
  - Figure 2.1.1 Completed Development Plan – Outline Component;
  - Figure 3 Watercourse Plan – Outline Component;
  - Planning Application Boundary (Red Line) Plan [by Prior & Partners, WOI-HPA-PAB-01];
  - Parameter Plan 1 Landscape and Public Realm [by Prior & Partners, WOI-HPA-PLAN-PP01-01]
  - Completed Development Landscape Plan – Outline Component [by Gillespies, P12061-00-001-GIL-Illustrative Masterplan BNG Areas.dwg];
  - BNG Areas Table [by Gillespies, P12061-00-001-GIL-0782-02];
  - Parameter Plan 6 Planning Application Tree Removal Plan [WOI-APP-PP06];
  - Horsham District Council – Draft Nature Recovery Network (NRN) and Land West of Ifield Map.
- Appendix 2: Baseline Habitat Descriptions
- Appendix 3: Baseline Biodiversity Score
  - Table 3.1 Baseline Biodiversity Score – Area Habitats;
  - Table 3.2 Baseline Biodiversity Score – Hedgerows; and

[8] Defra 2024. The Statutory Biodiversity Metric: User Guide. July 2024. Accessed from: https://assets.publishing.service.gov.uk/media/669e45fba3c2a28abb50d426/The_Statutory_Biodiversity_Metric_-_User_Guide__23.07.24_.pdf%20

  - Table 3.3 Baseline Biodiversity Score – Watercourses.
- Appendix 4: Post Development Biodiversity Score
  - Table 4.1 Post Development Biodiversity Score – Area Habitats;
  - Table 4.2 Post Development Biodiversity Score – Hedgerows; and
  - Table 4.3 Post Development Biodiversity Score – Watercourses.
- Appendix 5: Project Alignment with Biodiversity Net Gain Principles
- Appendix 6: Habitat Condition Assessment for Baseline and Completed Development Habitats
- Appendix 7: Designated Sites
  - Figure 7.1 Statutory Designated Sites
  - Figure 7.2 Non-Statutory Designated Sites
  - Figure 7.3 Ancient Woodland
  - Figure 7.4 Habitats of Principal Importance
  - Figure 7.5 Natural Forest Inventory
- Appendix 8: Arcadis BNG Assessment Report – Detailed Component.
- Appendix 9: Habitats Subject to Additionality
  - Table 9.1 Baseline Biodiversity Score
  - Table 9.2 Post-Development Biodiversity Score

1.4 Proposed Development

The Proposed Development includes land within the administrative area of Horsham District Council (HDC), totalling approximately 171 hectares (ha).

The Applicant intends to submit a HPA), part outline and part full planning application, for a phased, mixed-use development comprising:

- A full element covering enabling infrastructure including the Crawley Western Multi-Modal Corridor (Phase 1, including access from Charlwood Road and crossing points) and access infrastructure to enable servicing and delivery of secondary school site and future development, including access to Rusper Road, supported by associated infrastructure, utilities and works, alongside; and
- An outline element (with all matters reserved) including up to 3,000 residential homes (Class C2 and C3), commercial, business and service (Class E), general industrial (Class B2), storage or distribution (Class B8), hotel (Class C1), community and education facilities (Use Classes F1 and F2), gypsy and traveller pitches (sui generis), public open space with sports pitches, recreation, play and ancillary facilities, landscaping, water abstraction boreholes and associated infrastructure, utilities and works, including pedestrian and cycle routes and enabling demolition.

This HPA is for a phased development intended to be capable of coming forward in distinct and separable phases and/or plots in a severable way. Subject to the approval and any conditions placed on the grant of permission for the HPA, construction is estimated to commence in 2027, with initial occupation of the school anticipated in 2028, and the homes in 2029 and continuing until 2041.

The Proposed Development is illustrated in the Parameter Plan 1 Landscape and Public Realm [by Prior & Partners, WOI-HPA-PLAN-PP01-01, REV P01] included in Appendix 1.

1.5 National Planning Policy and Legislation

BNG is a policy requirement in England, under the National Planning Policy Framework (NPPF; 2024)[9] and became a legal requirement in England in 2024[10].

The Biodiversity Gain (Town and Country Planning) (Modifications and Amendments) (England) Regulations 2024[11] and the Environment Act 2021 (Commencement No. 8 and Transitional Provisions) Regulations 2024[12] modify the Town and Country Planning Act 1990 to bring various provisions of the Environment Act 2021 into force, including part of Section 98, which makes provision for biodiversity gain to be a condition of planning permission in England, where the application was made on or after 12th February 2024. The provisions are designed to ensure that developers leave the natural environment in a better state than it was before development. Grants of planning permission in England must be subject to a condition to secure that the 'biodiversity gain objective' is met. The 'Biodiversity Gain Objective' is that, 'in relation to development for which planning permission is granted, the biodiversity value attributable to the development exceeds the pre-development biodiversity value of the onsite habitat by at least the relevant percentage'. The 'relevant percentage' may change, but is currently set at 10%.

Every planning permission granted on an application for planning permission made on or after 12 February 2024, for the development of land in England shall be deemed to have been granted subject to the condition that the development may not be begun unless a biodiversity gain plan has been submitted to, and approved by, the planning authority. Biodiversity values of any habitat or habitat enhancement must be calculated in accordance with the biodiversity metric, which is a document for measuring, for the purposes of this legislation, the biodiversity value or relative biodiversity value of habitat or habitat enhancement. The biodiversity metric is to be produced and published (and may be revised) by the Secretary of State.

In relation to any development for which planning permission is granted, the pre-development biodiversity value of the onsite habitat is the biodiversity value of the onsite habitat on the relevant date (the date on which the planning permission is granted, or before). The post-development biodiversity value of the onsite habitat is the projected value of the onsite habitat as at the time the development is completed.

1.6 Local Planning Policy

The Site falls into the jurisdiction of Horsham District Council (HDC).

1.6.1 Horsham District Planning Framework (HDPF) 2015[13]

This is the current Local Plan for Horsham. The following briefly summarises the chapters and policies that are relevant to BNG and biodiversity in general, and to the development proposals at the Site.

- Policy 24: Environmental Protection - Requires that development protects natural assets (habitats, species, soils, water) and avoids or mitigates harmful effects on biodiversity as part of environmental assessment.

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[9] Ministry of Housing, Communities & Local Government, 2024. National Planning Policy Framework (NPPF), last updated 12 December 2024. Accessed from: National Planning Policy Framework - GOV.UK

[10] Department for Environment Food & Rural Affairs, 2021. Environment Act 2021. Accessed from: https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted

[11] Biodiversity Gain (Town and Country Planning) (Modifications and Amendments) (England) Regulations 2024. https://www.legislation.gov.uk/uksi/2024/50/contents/made

[12] Environment Act 2021 (Commencement No. 8 and Transitional Provisions) Regulations 2024. https://www.legislation.gov.uk/uksi/2024/44/made

[13] Horsham District Council, 2015. Horsham District Planning Framework (excluding South Downs National Park). Available at: https://www.horsham.gov.uk/__data/assets/pdf_file/0016/60190/Horsham-District-Planning-Framework-November-2015.pdf.

- Policy 25: District Character & Natural Environment - Obligates development to retain, enhance, or restore features like woodlands, hedges, watercourses, species-rich grasslands, and to enhance landscape-scale biodiversity and ecological networks.
- Policy 26: Countryside Protection - Controls development outside settlements, permitting only "essential" rural and rural-economy development, and in such cases must conserve and enhance landscape and ecological character.
- Policy 31: Green Infrastructure and Biodiversity - This is the primary biodiversity policy, mandating that development:
    1. Protects existing green infrastructure (GI) — e.g., parks, woodlands, wetlands, watercourses, hedgerows.
    2. Creates new or enhances GI to support ecological connectivity, wildlife refuge, climate resilience, and community access.
    3. Promotes multi-functional networks — delivering benefits for wildlife, flood control, recreation, cooling, and links (e.g., green corridors).
    4. Aligns with the Green Infrastructure Strategy, and priority Biodiversity Opportunity Areas (per the Sussex Biodiversity Action Plan).
    5. Contributes where appropriate to biodiversity net gain, ecological restoration, species enhancement, or habitat creation.

HDPF's Policy 31 implements the National Planning Policy Framework (NPPF) objective of moving from "no net loss" to enhancement of biodiversity, by integrating green infrastructure, habitat quality, buffers, and connectivity. Although BNG was not statutorily required until after HDPF adoption, the plan anticipates this approach—encouraging habitat creation, expansion, and functional ecological networks as part of future policy evolution. That the plan does not include a 10% BNG requirement does not impact the statutory requirement to deliver that gain.

1.7 Local Planning Guidance

1.7.1 Horsham District Council Biodiversity and Green Infrastructure – Planning Advice Note 2022[14]

HDC produced this Planning Advice Note (PAN) to provide guidance for applicants and decision makers on how Biodiversity and Green Infrastructure should be taken into account within development proposals and demonstrate compliance with the NPPF requirement for 'measurable net gains for biodiversity'.

In the first instance, development proposals should establish the baseline biodiversity value of the site using the Biodiversity Metric, demonstrate the use of the mitigation hierarchy as well as the provision of BNG. Development proposals should take a landscape led approach with BNG delivered on site in the first instance. If this is not possible, regard may be given to off-site provision.

1.7.2 Horsham Green Infrastructure Strategy and Guide 2024[15]

This strategy is an update to HDC's Green Infrastructure Strategy 2014[16] and provides planning guidance to inform development proposals and planning decisions, to ensure that future development protects delivers and wherever possible improves and enhances, the District's green infrastructure network. The vision is to create a district wide network of high-quality multifunctional

[14] Horsham District Council, 2022. Biodiversity and Green Infrastructure: Planning Advice Note. October 2022. Available at: https://www.horsham.gov.uk/__data/assets/pdf_file/0019/119530/Biodiversity-and-Green-Infrastructure-Planning-Advice-Note.pdf. [Accessed: 13/06/2024]

[15] Horsham District Council 2024. Green Infrastructure Strategy and Guide. Available at: Green Infrastructure Strategy and Guide [Accessed: 20/03/2025]

[16] Horsham District Council, 2014. Green Infrastructure Strategy: Horsham District Planning Framework. Available at: https://www.horsham.gov.uk/__data/assets/pdf_file/0013/132610/24-01-19-GI-Strategy_ALL-Final_rdcd.pdf. [Accessed: 13/06/2024]

greenspaces and waterways, that are protected, managed and deliver environmental, social and economic benefits.

The strategy states that all planning proposals requiring the submission of a planning application must have regard to how they link to existing green infrastructure and how they may be able to provide enhancement in accordance with the NPPF. All applications are expected to meet the mandatory biodiversity requirements or those set in the Local Plan (which isn't applicable at present) where a threshold above the mandatory BNG is set in policy.

Proposed development designs should take a holistic approach seeking to include both existing and new elements of green infrastructure, within the site and connecting to elements surrounding the site, in order to deliver biodiversity gains, nature recovery and open space. This approach links to open space standards, biodiversity net gain (BNG), Local Nature Recovery Strategies (LNRSs), and the emerging Nature Recovery Network (NRN) introduced by the Environment Act 2021.

Included in the strategy is the Horsham District: Green Infrastructure Key Component Map and Area Profiles, highlighting key sites the council seeks to retain, enhance and buffer/expand: protected sites, ancient woodland, watercourses, open space sites, protected, priority and notable habitats, irreplaceable habitats, veteran trees, green corridors and Biodiversity Opportunity Areas (BOAs). BOAs are those with the 'best opportunity for enhancing biodiversity', often buffers around existing reserves or linkages between existing sites.

In principle, all development should optimise additional planting and creation of new habitats, that are locally appropriate and use a variety of mostly native plant species to increase biodiversity. In relation to biodiversity and habitats as well as their long-term sustainability, major development applications should evidence consideration of:

- retention and provision of mosaics of habitats and how the scheme's green infrastructure contributes to the Lawton principles of 'Bigger, Better, More and Joined Up Networks' for biodiversity, as appropriate to the site;
- how the scheme will use and incorporate locally appropriate and locally sourced materials / plants, and pollinators (native and non-native may be appropriate in urban areas otherwise native species should predominate whilst taking into account climate resilience); and
- how the management, maintenance and monitoring will be funded and undertaken for a minimum of 30 years, or as agreed with the Council, with clarity over what falls within biodiversity net gain requirements.

1.7.3 Horsham Nature Recovery Network Report 2021[17]

The Horsham Nature Recovery Network (NRN) report sets out the development of a NRN for Horsham District to take advantage of existing areas with biodiversity value or high biodiversity potential, considering how they could be improved and linked together. A NRN map has been produced demonstrating what could be achieved and where action could be targeted to reverse the biodiversity crisis, an approach which is reliant on landowners and land managers for delivery.

The NRN map identifies protected sites in Horsham District, as well as areas of 'opportunity' for biodiversity enhancement, including high or very high habitat areas, buffer zones, potential wildlife corridors and stepping stones. The NRN map is indicative and high level at this stage, and is not a policy requirement. The map will be refined as more accurate data becomes available, species data will be added and habitats will be linked to habitats beyond the District.

[17] Horsham District Council, 2021. Horsham Nature Recovery Network. Available at: https://www.horsham.gov.uk/climate-and-environment/wilderhorshamdistrict/horsham-district-nature-recovery-networks/horsham-district-nature-recovery-network-report [Accessed on 13/06/2024]

There are twelve BOAs present, wholly or partly, within Horsham District. Each BOA has a set of conservation priorities for biodiversity so that habitat enhancement, restoration and recreation projects can make the most of opportunities to establish large areas of habitat and connections between them. The BOAs are priority areas of opportunity, not constraint, for restoration and creation of Biodiversity Action Plan (BAP) habitats.

Areas that are part of the Horsham NRN in the most current NRN map, areas covered by Rusper Ridge Biodiversity Opportunity Area[18] (BOA) with the Ifield Brook BOA adjacent have been considered in this BNG and RCA assessment when assigning strategic significance values to habitats, including watercourses, within the Site boundary.

[18] Horsham District Council (n.d.) *Appendix C: Rusper Ridge Biodiversity Opportunity Area*. Available at: https://strategicplanning.horsham.gov.uk/gf2.ti/f/1124386/64273157.1/PDF/-/Appendix-C-Rusper-Ridge-Biodiversity-Opportunity-Area.pdf (Accessed: June 2025)

2. METHODOLOGY

The methodology used for this assessment follows the published UK BNG guidance and Statutory Biodiversity Metric guidance:

- CIEEM, CIRIA, IEMA, 2016. Biodiversity Net Gain: Good practice principles for development[19];
- CIEEM, CIRIA, IEMA, 2019. Biodiversity Net Gain: Good practice principles for development. A practical guide[20];
- Defra, 2024. Statutory Biodiversity Metric: User Guide[21];
- Defra, 2024. Statutory Biodiversity Metric Calculation Tool[22]; and
- Defra, 2024. Statutory Biodiversity Metric Condition Assessments[23].

2.1 Desk Study

A desk study was conducted as part of Volume 1: Main Environmental Statement; Chapter 8: Biodiversity outlining the likely biodiversity effects to arise from the Proposed Development and has been reappraised in the context of this BNG assessment. The ecological records database for Sussex Biodiversity Records Centre[24] and Surrey Biodiversity Information Centre[25] was contacted to provide the details of the non-designated sites and protected species within the Zone of Influence (ZOI) as outlined below. In addition, the Multi Agency Geographic Information for the Countryside (MAGIC)[26] was searched for information on statutory sites. Supplementary information on the Site and its surroundings were obtained from aerial images available from Google™ Earth Pro and the Horsham Nature Recovery Network (NRN) report and maps. The purpose of the desk study was to identify designated sites, irreplaceable habitats and other natural features and habitats which may have importance for biodiversity.

The following ZOI has been considered:

- Designated sites within and up to 2 km from the Site, including Special Areas of Conservation (SACs), Special Protection Areas (SPAs), and Sites of Special Scientific Interest (SSSIs); Other sites of importance for biodiversity, including National Nature Reserves (NNRs), Local Nature Reserves (LNRs) and Local Wildlife Sites (LWSs) within and up to 2 km from the Site;
- Irreplaceable habitats including ancient woodland and ancient/veteran trees within the Site; and
- Habitats of Principal Importance (HPI) (in accordance with Natural Environment and Rural Communities Act (NERC) 2006 Section 41 (S41)[27]); and strategic wildlife corridors (areas forming part of the Horsham NRN) within the Site.

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[19] CIEEM, CIRIA, IEMA, 2016. Biodiversity Net Gain: Good practice principles for development. Accessed from: https://cieem.net/wp-content/uploads/2019/02/Biodiversity-Net-Gain-Principles.pdf

[20] Baker, J., Hoskin, R. & Butterworth, T., 2019. Biodiversity Net Gain: Good practice principles for development. Part A: A practical guide. CIRIA, London.

[21] Defra 2024. The Statutory Biodiversity Metric: User Guide. July 2024. Accessed from: https://assets.publishing.service.gov.uk/media/669e45fba3c2a28abb50d426/The_Statutory_Biodiversity_Metric_-_User_Guide__23.07.24_.pdf%20 [Accessed on: 24/07/2024]

[22] Defra 2024. Statutory Biodiversity Metric Calculation Tool. Accessed from: https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides#full-publication-update-history [Accessed on: 24/07/2024]

[23] Defra 2024. Statutory Biodiversity Metric Condition Assessments. Accessed from: https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides#full-publication-update-history [Accessed on: 24/07/2024]

[24] Sussex Biodiversity Records Centre (2025). Ecological data search for land west of Ifield. Report reference SxBRC/25/069. Prepared on 03/05/2025.

[25] Surrey Biodiversity Information Centre (2023). Background Ecological Data Search; West of Ifield. Report reference SBIC/25/058. 02/06/2025.

[26] Magic Map. Accessed from: https://magic.defra.gov.uk/magicmap.aspx

[27] The Stationary Office (2006). Natural Environment and Rural Communities Act 2006.

2.2 Baseline Biodiversity Assessment: Area-based Habitats

2.2.1 Habitat Survey and Condition Assessment

First Revision

An extended Phase 1 habitat survey was undertaken by Arcadis in 2018/19. Ramboll reviewed the work by Arcadis and subsequent studies, update habitat surveys and a Habitat Condition Assessment (HCA) were undertaken in August and September 2020 by Ramboll. HCA data was later assigned using Biodiversity Metric 4.0 HCA sheets[28].

An update extended UKHab survey and HCA of the Site was undertaken by Jonathan Molesworth (ACIEEM) and Alex Powell (GradCIEEM) on 9th, 10th, 11th, 22nd, 23rd, and 24th August 2022. At the time of survey both Jonathan and Alex had over two years' experience undertaking Biodiversity Net Gain (BNG) assessments and were competent at assessing and classifying UK habitats. Jonathan worked as an ecologist from 2015 to 2024, held Associate Membership with CIEEM (ACIEEM) and a first-class degree in Biological Sciences. Alex had worked as an ecologist since 2018, was a Graduate Member of CIEEM (GradCIEEM), holds a degree in Environmental Science and a Master's degree in Plant Diversity. The weather during the surveys was consistently very warm and dry, with temperatures ranging from 20-35°C. The survey period proceeded a prolonged period of extreme drought, and this extremely dry weather continued throughout the duration of the survey period.

Following an update to the Site boundary, additional site visits were conducted; on 5th April 2023 by James Hyrnkiewicz and Rebecca Brightling, and on 12th April 2023 by James Hyrnkiewicz and Ellie Frew to map additional habitats and undertake an HCA in an area to the north of the Site (around Charlwood Road, Bonnetts Lane, Ifield Avenue and Ifield Green). James is an Associate Member of CIEEM (ACIEEM) with a BSc (Hons) in Ecology & Conservation and has worked professionally as a consultant ecologist since 2016. Rebecca has worked as an ecologist since 2021 and holds a BSc in Geography and a Master's degree in Conservation Ecology. Ellie has a BSc (Hons) in Zoology and an MSc (Research) in Conservation and Ecology and is a Full Member of CIEEM (MCIEEM). Ellie has worked as a professional ecological consultant since 2014. During this update survey, several fields in the north of the Site which were previously extremely arid were also revisited. The weather during the survey was warm with clear skies on 5th April and overcast with light rain on 12th April 2023.

Second Revision (Required for HPA Submission)

A full update extended UKHab survey and HCA of the whole Site was undertaken in June 2024 by James Hrynkiewicz and Eleanor King to ensure valid habitat survey data for the submission of the HPA. Additional Site visits were undertaken on 21st and 26th March 2025 by James Hyrnkiewicz to confirm habitats and where necessary, undertake HCAs in some areas. The data from these surveys was used to inform this BNG assessment.

The main habitats present were recorded using the UK Habitat Classification System (UKHab)[29] survey methodology and labelled accordingly, as shown in Figure 1.2.1-1.2.4, Appendix 1. In addition to general habitat classification, a list was compiled of observed plant species was made. Habitat descriptions are provided in Appendix 2.

An HCA was undertaken for each habitat where required, using the Defra Statutory Biodiversity Metric HCA sheets, and is presented in Appendix 5.

2.2.2 Habitat Distinctiveness, Irreplaceable Habitats and Strategic Significance

The identified on-Site baseline habitats were classified in respect of distinctiveness, irreplaceability and strategic significance.

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[28] Natural England 2023. Biodiversity Metric 4.0: Habitat Condition Sheets. Accessed from: http://nepubprod.appspot.com/publication/6049804846366720

[29] UK Habitat Classification System, [online] Available from: https://ukhab.org/

Distinctiveness per habitat type was determined by the pre-set values within the Statutory Biodiversity Metric. The levels of distinctiveness are defined as follows:

- Very Low: Little or no biodiversity value e.g. hardstanding or sealed surface;
- Low: Habitat of low biodiversity value e.g. temporary grass;
- Medium: Semi-natural habitats not classed as Priority Habitat but with substantial wildlife benefit e.g. mixed scrub;
- High: Priority Habitats as defined in Section 41 of the NERC Act requiring conservation action, e.g. lowland fens; and
- Very High: Priority habitats as defined in Section 41 of the NERC Act that are highly threatened, internationally scarce and require conservation action, e.g. blanket bog.

Losses of 'Very High' distinctiveness habitats should always be avoided and bespoke compensation for losses will be required and agreed with the determining body or planning authority, on a case by case basis.

If present, irreplaceable habitats, many of which are specified as 'Very High' distinctiveness habitats, are also recorded and evaluated within the UKHab survey, where present.

Irreplaceable habitats are defined as habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. Irreplaceable habitats include ancient woodland, ancient/veteran trees and blanket bog.

Ancient woodland sites encompass ancient semi-natural woodlands (ASNW), plantations on ancient woodland sites (PAWS) and ancient wood-pasture and parkland. These habitats should be recorded as irreplaceable habitat and may fit a range of Metric woodland habitat types.

Ancient and veteran trees can be individual trees or groups of trees and are often found outside ancient woodlands. They may be found within a range of situations including within woodland, hedgerows, lines of trees, wood pastures, orchards, historic parkland, open habitats and urban settings. Wherever ancient and veteran trees occur they should be considered and recorded as irreplaceable habitat. Any ancient/veteran trees are irreplaceable habitats and are considered separately from other individual trees. Where ancient/veteran trees are present within lines of trees, their presence of is a defining feature of an ecologically valuable line of trees; however, this does not mean that the rest of the line of trees is also deemed irreplaceable. Furthermore, all ancient trees are veteran trees, but not all veteran trees are ancient[30]. The age at which a tree becomes ancient or veteran will vary by species because each species ages at a different rate.

In line with BNG guidance, any SAC, SPA, SSSI or irreplaceable habitats identified within the Site would not be included within the baseline calculations. Even though all irreplaceable habitats fall outside of BNG, they should still be recorded in the Metric calculation, categorised as 'Irreplaceable'. Due to their high importance for biodiversity, impacts to these sites and/or habitats should be avoided wherever feasible as it is not possible to compensate for them within a reasonable management timeframe.

The strategic significance rating was assigned based upon the biodiversity value of the local surroundings, as determined by the desk study with checks of local biodiversity plans and sites (including Local Biodiversity Action Plans (BAPs), Nature Recovery Networks (NRNs), Biodiversity Opportunity Areas (BOAs), NNRs, LNRs, Local Wildlife Sites (LWSs), local planning policy maps) and

[30] Natural England and Forestry Commission (2022). Guidance. Ancient woodland, ancient trees and veteran trees: advice for making planning decisions. Available at: https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions

checking if any of the habitats were strategically significant for rare species (e.g. critical for home range, functionally important for the species, etc).

The following significance levels apply:

- Formally identified in local strategy = High strategic significance
- Location ecologically desirable but not in local strategy = Medium strategic significance
- Area/compensation not in local strategy/no local strategy = Low strategic significance

2.3 Baseline Biodiversity Assessment: Watercourses

Different watercourse habitat types such as ditches, rivers, streams, canals and culverts, require different condition assessment methodologies.

2.3.1 Ditches

An HCA was undertaken by Jonathan Molesworth during the 2022 UKHab survey to determine the condition of the ditches within the Site.

An update HCA was undertaken by Eleanor King and James Hrynkiewicz during the June 2024 UKHab survey to update the condition scores of the ditches within the Site.

2.3.2 River Condition Assessment

Watercourses such as rivers, streams and canals use the RCA methodology.

First Revision

An RCA was undertaken on 23rd and 24th March and 4th April 2023 to determine the condition of the rivers located within 10m of the Site boundary by MoRPH trained and certified surveyor Kristina Lewis (MCIEEM) assisted by James Hrynkiewicz (ACIEEM). Kristina holds a BSc in Geography & Environmental Science with a Masters degree in International Development & Management (Natural Resources Specialisation) and has worked professionally in ecological consultancy since 2003. The RCA consisted of a desk-based assessment to determine the 'River Type' and a field survey using the Modular River Physical (MoRPH) Survey methodology to assess the condition of watercourses (rivers and streams).

Second Revision (Required for HPA Submission)

An update RCA was undertaken on 25th - 28th March 2025 to assess the condition of rivers located within 10 metres of the Site boundary. The survey was carried out by MoRPH-trained and certified surveyor Daniel Stewart. The RCA included a desk-based assessment to identify the 'River Type' and a field-based survey using the Modular River Physical (MoRPH) Survey methodology to assess river condition.

Weather conditions during the survey period were hot, sunny, and dry, with no rainfall and temperatures reaching around 21°C. Conditions were noted to be very dry with low water levels, which may have influenced certain aspects of the physical habitat condition observed.

The field survey data was subsequently input into the MoRPh web application (Cartographer[31]) in combination with the desk-based assessment of the river type, to provide the preliminary river condition for each sub-reach of each river, where a set of five MoRPh surveys were completed. The preliminary river condition is then compared against thresholds for each river type to obtain the overall final river condition assessed against defined thresholds according to each river type[32].

The data from these surveys was used to inform this BNG assessment.

2.3.3 Habitat Distinctiveness and Strategic Significance for Watercourses

Distinctiveness for watercourses was determined using the following definitions pre-set within the Defra Metric, described along with their UKHab code below:

- Priority habitat (r2a): Highly naturally functioning stretches of rivers identified on the Priority River Habitat Map[31], and un-mapped stretches meeting the criteria[32] for inclusion into the Priority River Habitat Map = Very high distinctiveness
- Other rivers and streams (r2b): Rivers and streams that are not classified as Priority River Habitat = High distinctiveness
- Canals (r1e): An artificial body of water originally created for the purposes of navigation, whether it is currently navigable or not = Medium distinctiveness
- Ditches (r1g – Other Standing waters (50 – Ditch): Artificially created linear water-conveyancing features which are less than 5m wide, and are likely to retain water for more than four months of the year = Medium distinctiveness.
- Culverts (including culverted sections of any watercourse features): A covered channel or pipe designed to prevent the obstruction of a watercourse or drainage path by an artificial construction (and as defined by the Flood and Water Management Act 2010[33]) = Low distinctiveness

The strategic significance was assigned for each watercourse based on criteria in Section2.3.3. In addition, the River Mole (also known as Baldhorns Brook) and Ifield Brook are identified in Environment Agency Catchment Plans[34] and River Basin Management Plans, which are discussed in more detail in the related Water Framework Directive Assessment[35]report.

2.3.4 Riparian Zones

The riparian zone is a defined area from the bank top of the watercourse, which is the point where there is a break in slope between the river channel and the surrounding land. It supports features which influence the hydrological, geomorphological and biological functions or processes within the watercourse channel. It also provides ecological function for riparian or aquatic species. Vegetation within the riparian zone influences watercourse function.

The Metric User Guide indicates that riparian zones for 'Other rivers and streams' are 10 m from the top of each bank and for 'Ditches' are 5 m from the top of each bank. Habitats present within the riparian zone are assessed separately within the habitat area and hedgerow modules of the Metric.

2.3.5 Riparian Zone Encroachment

Riparian zone encroachment describes any development feature or intervention within the riparian zone of a watercourse that reduces the quantity, quality or ecological function of the riparian zone. Encroachment examples include existing buildings or hardstanding, established footpaths, management interventions (such as agriculture), or structures that prevent wildlife from accessing the riverbank. At the Site, management interventions such as cropland, gardens, cattle grazing and green keeping/Ifield Golf Course management have been identified as causing encroachment into the riparian zone at baseline.

Riparian zone encroachment was measured at baseline based on the habitats recorded from the UKHab surveys where available. For areas within the riparian zone outside the Site where habitat survey data was unavailable, encroachment was manually assigned in GIS based on a visual assessment of satellite imagery. The definitions provided in the Statutory Metric User Guide were

[31] Freshwater Biological Association, Natural England & Cartographer (2023). Available at: https://priorityhabitats.org/display-data/rivers-data/
[32] Natural England (2019). Guidance on river and stream naturalness assessment. Available at: https://priorityhabitats.org/wp-content/uploads/River-and-stream-naturalness-assessment-guidance-document-March-2021.pdf
[33] The Stationery Office (2010). Flood and Water Management Act 2010. Available at: https://www.legislation.gov.uk/ukpga/2010/29/contents
[34] Environment Agency (2023). Catchment Data Explorer. Available at: https://environment.data.gov.uk/catchment-planning/v/c3-plan/OperationalCatchment/3495
[35] Ramboll, Water Framework Directive Assessment WOI-HPA-DOC-WFDA-01

used to assign encroachment bands (No encroachment, Minor, Moderate or Major) separately for both banks of each watercourse feature and entered into the Metric. For the purposes of this assessment, encroachment bands were defined based on the % coverage of encroachment habitats within the zone 4 to 10m from the bank top as follows: No encroachment = 0%, Minor = <10%, Moderate = 10 to 25% and Major = >25%.

2.3.6 Watercourse Encroachment

Watercourse encroachment accounts for development within a riverbank or channel that impacts the function of the river corridor. Examples of watercourse encroachment into the channel and/or include engineered bank revetments, headwalls, jetties, pontoons and weirs. For the Metric, watercourse encroachment is defined as a feature that adversely affects the natural function of the watercourse.

Extent of watercourse encroachment (No encroachment, Minor or Major) were selected based upon definitions provided within the Statutory Biodiversity Metric User Guide. Watercourse encroachment for rivers was measured as 'No encroachment' at baseline based on results from the RCA survey of Ifield Brook, River Mole and Hyde Hill Brook, and Ifield Mill Stream. For ditches, watercourse encroachment was assigned as 'No encroachment' expect for the unnamed watercourse/ditch that feeds into the River Mole which was assigned the same encroachment rating as the River Mole.

2.4 Baseline Biodiversity Calculation

The biodiversity unit (BU) score per area-based habitat was calculated via the Metric using the quality factors (distinctiveness, condition and strategic significance) and their assigned values. The sum of all the BUs provided the area-based habitat biodiversity baseline.

Linear features are calculated using the same quality factors and for hedgerows are recorded as hedgerow units (HU) and for watercourses recorded as watercourse units (WU).

Any individual trees found on-Site which did not form part of a habitat type were noted and entered into the 'Tree Helper' section of the Metric to determine the area of individual trees. This area was then added to the Metric as the area-based habitat 'Individual Trees', either urban or rural as applicable.

Within the Metric, the net change in biodiversity is measured separately for area-based habitats, hedgerows and watercourses. A 10% net gain is required in BU, HU and WU independently of each other.

2.5 Post-development Biodiversity Assessment

2.5.1 Post-development Habitats and Target Condition

Detailed Component

In respect of the Detailed Component completed by Arcadis, post-development landscape plans have been produced by Arcadis. The drawings which form the basis of the calculations for the Detailed Component are provided in Appendix 8. The UKHab habitat types and target condition of the post-development habitats within the Detailed Component were assigned by Arcadis. The results of their assessment can be found in Appendix 8.

Outline Component

In respect of the Outline Component completed by Ramboll, post-development landscape plans have been produced by Gillespies. The drawings and documents which form the basis of the BNG calculations for the Proposed Development are listed below:

- Completed Development Landscape Plan [by Gillespies, P12061-00-001-GIL-Illustrative Masterplan BNG Areas.dwg];
- BNG Areas Table [by Gillespies, P12061-00-001-GIL-0782-02]; and

- Trees Removal Plan [by Gillespies, WOI-APP-PP06-Tree Removal Plan-07.pdf].

Habitats have been translated from the landscape plans and 'BNG Areas Table' document into UKHab habitat types for the purpose of the BNG assessment. These translations are presented in Table 4.1 in Section 4 of the report, and have been assigned, along with the target habitat condition scores, based upon the expert judgement of the ecologist and the future management aspirations of the Site.

Any newly planted individual trees which do not form part of a distinct habitat have been entered as 'small' trees into the 'Tree Helper' section of the Metric to calculate a total area (ha) and input into the Metric as 'Individual Trees'. In this assessment, all individual trees most closely matched the classification of 'Individual trees – Urban Tree' and a target condition of moderate was applied in line with Defra guidance.

2.5.2 Habitat Distinctiveness and Strategic Significance

The distinctiveness was again assigned by the Metric, and based upon the habitat, hedgerow or watercourse types entered in the post-development sections of the Metric. Strategic significance values were assigned following the methodology described in Section 2.2.2.

2.5.3 Temporal and Difficulty Risk Factors

The relevant risk factors for the 'time to target condition' and the 'difficulty to create' were assigned by the Metric and are deemed appropriate for the Proposed Development.

2.5.4 Advanced or Delayed action

Where required, the temporal risk multiplier was adjusted to account for any time difference between the loss of habitats and the compensation of new habitats.

2.5.5 Habitat Creation and Enhancement

The BNG process includes a consideration of whether habitats and watercourses will be created, retained and enhanced. The following actions were considered for each habitat on-site and the action entered into the Metric:

- Habitat lost to permanent development;
- Habitat lost during construction and re-created post-development;
- Habitat retained (no improvement); and
- Habitat retained and enhanced.

2.5.6 Additionality

Post-development habitats subject to additionality principles have been considered within this BNG assessment. In this case, this includes any areas where the developer is obliged under national guidance to undertake mitigation to compensate for impacts on ancient woodland. Mitigation planting in the ancient woodland buffer can count only in part towards BNG, such that at least 10% of the total (110%) BNG should come from measures which are not ancient woodland mitigation.

Within the total, wider ecological buffer, a 15 m 'mitigation buffer' has been applied to Ancient Woodlands and a 5 m buffer has been applied to Hyde Hill Wood LWS to account for the creation of a scrub screening. This is based on the proposals that a 5 m scrub screening will prevent increased recreational pressure on the ancient woodland and mitigate for potential impacts to bats. Changes in biodiversity value due to actions (habitat creation / enhancement) in these buffer areas have been calculated using a separate metric including only these habitats in those areas. This is to confirm that the number of biodiversity units generated from habitats subject to additionality do not contribute more than up to a no net loss (i.e., do not total more than the total baseline biodiversity value).

2.5.7 Post-development Riparian Zone Encroachment

Riparian zone encroachment was assigned at post-development using the same approach as for the baseline detailed in Section 2.3.5, but in this case based on the habitat types in the landscape plans produced by Gillespies listed in Section 2.5.1 for areas within the Site boundary. For areas within the riparian zone outside the Site, the encroachment has been assumed to remain unchanged from the baseline, on the assumption that there will be no changes to habitats in these areas as a result of the Proposed Development.

For the purpose of this assessment, watercourses have been entered into the metric based on changes in encroachment from baseline to post-development; as retained if there is no change in encroachment, as loss and creation if encroachment increases, and as enhanced if encroachment decreases.

2.5.8 Post-Development Watercourse Encroachment

For the purposes of this assessment, post-development watercourse encroachment has been assumed to be the same as at baseline for all watercourses. This should be reassessed and updated once the detailed design becomes available (as explained in Section 5.3) and assessment of impacts from in-channel works and any proposed engineered features have been completed.

2.6 Biodiversity Metric

The assessment was undertaken using the Defra Statutory Biodiversity Metric.

2.7 Assumptions and Limitations

It should be noted that availability and quality of the data obtained from third party desk studies is reliant on third party responses. This varies from region to region and for different species groups.

Furthermore, the comprehensiveness of data often depends on the level of coverage, the expertise and experience of the recorder and the submission of records to the local recorder. Accordingly, the conclusions in this report are valid only to the extent that the information provided to Ramboll was accurate, complete and available to Ramboll within the reporting schedule.

This report contains recommendations for how this project might deliver BNG, including preliminary recommendations for watercourses and hedgerows. In submitting these recommendations, Ramboll has no Design Liability associated with these recommendations for BNG.

2.7.1 Area-based Habitats

The UKHab survey provides a snapshot of ecological conditions and does not record plants or animals that may be present on-Site at different times of the year but were absent at the time of the survey. The absence of a particular species cannot definitely be confirmed by a lack of field signs and only concludes that an indication of its presence was not located during the survey effort. The methodologies used are in accordance with accepted professional guidance[19,20].

The UKHab survey and HCA by Ramboll in August 2022 were undertaken during a period of extreme drought prior to and during the duration of survey. A full species list could not be compiled for all habitats because some flora was dead or dying. Where this was the case, a precautionary approach was taken whereby observations made during previous habitat surveys conducted at the Site by Ramboll in 2020 and Arcadis in 2018 were considered. This was particularly pertinent for grassland habitats, and ditches and ponds (many of which were dry or had very low water levels). Criteria within the HCA were ‘passed’ or ‘failed’ based upon professional judgement. Several fields in the north of the Site were revisited by Ramboll in April 2023 and again in June 2024, during more favourable conditions, in order for an updated species list and HCA to be taken of the grassland which would more accurately reflect ‘normal’ conditions. This ensures the survey and baseline data used for this assessment is up to date and accurate, removing any limitations from survey data collected during periods of drought.

As part of proposed future updates as part of detailed design stages, further HCA data for trees will be included once bat surveys of these trees are undertaken later in 2025. Presently all trees are assumed to be of moderate condition based on the HCA data available and the distinctiveness of the habitat type.

All habitat polygon areas were input into the Metric in hectares (ha), rounded up to two decimal places, and the lengths of linear features input into the Metric in kilometres (km), rounded up to two decimal places. This can cause a slight variation to the sum of the individual numbers but is unlikely to substantially change the results. The methodologies used are in accordance with accepted professional guidance[21].

A two-year delay in habitat creation for habitats within both the Detailed Component and Outline Component, and a two-year delay for habitat enhancement to lowland meadow in the Outline Component, has been applied in the metric on a precautionary basis to allow extra time for soil conditions to be modified for this habitat to establish (if required). This is based on the assumption that it will take at least two years to complete construction and habitat creation/enhancement for each phase after habitat removal.

Enhancement of retained areas of lowland mixed woodland from 'moderate' to 'good' condition is necessary to meet trading rules as discussed and agreed with the Client. It should be noted that the area includes woodland in polygon T124 which extends northwards until it meets Rusper Road (see Appendix 1, Figure 1.2.2). This block of woodland is shown on the 'Parameter Plan 1 Landscape and Public Realm' as 'Natural and Semi-natural Greenspace' in the south and 'Connective Green Infrastructure' in the north until it meets Rusper Road. For the purposes of this assessment and in order to meet trading rules, it has been assumed that this entire woodland block will be retained and enhanced. It should be noted that the woodland is only partially shown as 'To be retained' on the current 'Parameter Plan 6 Planning Application Tree Removal Plan' and 'Completed Development Landscape Plan', with the northern section ('Connective Green Infrastructure' as per the 'Parameter Plan 1 Landscape and Public Realm') not shown on these plans. It is worth noting that tree numbers labelled as part of the UKHab survey and used for the purposes of this BNG assessment and metric calculations, differ to the tree numbers labelled and presented within the Arboricultural Assessment. The number of trees may also differ between the two assessments due to different methodologies within each survey on what is and is not considered an individual tree. For this assessment, an individual tree is defined according to the UKHab classification[29] and Statutory Metric User Guide[8].

2.7.2 Watercourses

The length of the rivers within the Site boundary are based on measurements taken from official mapping sources including Ordnance Survey Open Rivers[36] and Environment Agency Statutory Main River Map[37], and therefore should be precise to scale.

There were minimal survey constraints, mainly dense vegetation limiting access to sections of rivers in. Nonetheless, MorPh5 surveys for the RCA were carried out as appropriate each river within the Site boundary (River Mole, Ifield Brook and Hyde Hill Brook).

Due to the presence of dense scrub or other vegetation along several stretches of the River Mole, Hyde Hill Brook and Ifield Brook, the banks and river channel were partially obscured. The location of MorPh5 modules surveyed was selected to avoid dense scrub and survey a selection of habitats with no or low vegetation present in order to view the channel bed. A section east of the start point of the River Mole and northern section of the Ifield Brook could not be accessed due to this. In places, assumptions were made for the modules based upon the visible features / characteristics and the surveyor's professional judgement.

[36] Ordnance Survey Open Rivers (2023). https://beta.ordnancesurvey.co.uk/products/os-open-rivers
[37] Environment Agency (2023). Available at: Statutory Main River Map (arcgis.com)

Where ditches were recorded alongside hedgerows or lines of trees, they were recorded as two separate linear features; a ditch entered into the watercourse module of the Metric and a hedgerow / line of trees entered into the hedgerows module of the Metric, rather than a hedgerow / line of trees associated with a ditch. This is because the ditches meet the definition of a watercourse ditch, that is they were artificially created linear water-conveyancing features less than 5 m wide and likely to retain water for more than four months of the year, as per Defra Statutory Biodiversity Metric: User Guide.

As the survey was undertaken in March 2025, early in the survey season, it is likely aquatic macrophytes of the river could not be accurately assessed due to any aquatic plants just leaving dormancy and being small in size increasing the difficulty to survey form the bankside. Nonetheless this is not a significant limitation for the survey results.

A section of the ditch flowing south to north into the River Mole located to the north of the Ifield Golf Course was not captured during the RCA. This section of the unnamed watercourse was surveyed as a ditch during the UKHab survey and an HCA was undertaken for this in August 2022 and May 2023 and has been assessed as a ditch within the watercourse module of the Metric. This is considered justified since this unnamed watercourse does not appear on the Environment Agency Statutory Main Rivers Map as a river.

Surface water drainage points connecting into the proposed Site wide network is subject to further confirmation and detailed design development and are not available at this time. Coordination with existing and proposed utilities and services will need to be undertaken during detailed design for ditches at post development stage. Further coordination is also required for final tree locations with other detailed design to avoid clashes with below ground utilities and drainage.

Furthermore, the drainage strategy is subject to West Sussex County Council (WSCC), Lead Local Flood Authorities (LLFA) and Environment Agency (EA) approval prior to construction and the drainage and watercourse design may need to change to meet WSCC, LLFA and EA approval.

3. BIODIVERSITY BASELINE WITHIN DEVELOPMENT SITE

3.1 Desk Study: Designated Sites

No Special Protection Areas (SPA), Special Areas of Conservation (SAC), or Ramsar sites are within a 2 km radius of the Site. There are five statutory designated sites within 2 km of the Site comprising two Sites of Special Scientific Interest (SSSIs), two Local Nature Reserves (LNRs) and one Area of Outstanding Natural Beauty (AONB) as summarised in Table 3.1. No National Nature Reserves (NNR) are located within 2 km of the Site and no SACs designated for bats are present within 5 km of the Site.

Statutory Sites

There are two statutory designated sites within 2 km of the Site, Buchan Hill Ponds Site of Special Scientific Interest (SSSI) located approximately 2 km south-east of the Site, and House Copse SSSI located approximately 0.8 km south-west of the Site. There are also two LNRs, one Country Park and one AONB within 2 km of the Site. This is summarised in Table 3.1 and illustrated in Appendix 7. These results are based on data obtained from local records centres in June 2025.

Table 3.1: Statutory Designated sites within 2km of the Site

Site Name	Designation	Reasons for Designation	Distance from Site (Approx.)
Willoughby Fields	LNR (also a LWS)	Large site containing several unimproved grassland fields with a network of hedgerows, areas of scrub and small copses that lies between the River Mole and an unnamed stream on the outskirts of Langley Green in Crawley. The site is well used by the public for informal recreation, and it adjoins a rugby club. A considerable amount of tree and hedge planting has been carried out on the site	0.6 km The River Mole flows into the LNR from the Site.
Target Hill Park	LNR	Located adjacent to Buchan Country Park, the site has a large area of grassland, scrub, and birch woodland situated on a hill top with views to the North Downs. Target Hill is managed as a Local Nature Reserve with the assistance of the Gatwick GreenSpace Partnership.	1.7 km
House Copse	SSSI	A small, isolated woodland. Likely, an 'ancient' woodland with continuity of woodland cover since at least the Middle Ages. This type of woodland cover is rare, being a close association of small-leaved lime *Tilia cordata* and hornbeam *Carpinus betulus*, previously managed as coppice, under oak standards, and is almost unknown elsewhere in Southern England.	0.8 km
Buchan Hill Ponds	SSSI	Three ponds are the best example in West Sussex of Wealden hammer ponds on acid Tunbridge Wells Sands. A nationally uncommon woodland type occupies the wetlands around the ponds and the site supports a rich dragonfly fauna which includes two particularly notable species.	2.0 km
High Weald	AONB	An area renowned for its extraordinary landscape and natural beauty. Its character is defined by rolling hills, ancient woodlands, irregular-shaped fields, small farms, and historic buildings. The area boasts significant biodiversity, including rare species of flora and fauna, as well as a rich heritage of traditional	1.75 km

Table 3.1: Statutory Designated sites within 2km of the Site			
		practices like coppicing. It is managed according the High Weald AONB Management Plan.	
Buchan	Country Park (also a LWS)	This site is a country park. It consists of an area of woodland with an increasing area of heathland, a small meadow and three large lakes on the south-west edge of Crawley.	1.7 km

Non-Statutory sites

There are 10 non-statutory designated sites within 2 km of the Site, as summarised in Table 3.2 and illustrated in Appendix 7. These results are based on data obtained from local records centres in June 2025.

Table 3.2: Non-Statutory Designated sites within 2km of the Site			
Site Name	**Designation**	**Reasons for Designation**	**Distance from Site (Approx.)**
Ifield Brook Wood and Meadows	LWS	A patchwork of grass fields surrounded by blocks and strips of scrub and semi-natural broadleaved woodland, a NERC S41 habitat, and mosaic habitats. A watercourse, Ifield Brook, flows along the eastern boundary of the LWS (and hence along the eastern Site boundary). The grasslands within the LWS appear to be largely unmanaged and as a consequence are dominated by coarse grasses.	Adjacent to Site, borders the east of the arable fields.
Hyde Hill	LWS	Lowland mixed deciduous woodland, a NERC S41 habitat. A moderate sized woodland. Much of this broadleaved woodland is also ancient and semi-natural. It forms part of a wider network of woodlands across the local landscape that are connected by hedgerows. The LWS is also notable for butterflies and moths *Lepidoptera*, with a number of notable butterfly species recorded from the site including dingy skipper *Erynnis tages*, white admiral *Limenitis camilla* and brown hairstreak *Thecla betulae*.	Adjacent to Site, borders south of the Ifield Golf Course
Ifield Pond and surroundings	LWS	This large pond, situated on the edge of Crawley, is of considerable local importance notably on account of its birdlife, dragonflies and amphibians. The pond is bisected by a railway line. The main pond is south of the railway, though the area to the north is also of great wildlife value.	0.4 km
Willoughby Fields	LWS	Large site containing several unimproved grassland fields with a network of hedgerows, areas of scrub and small copses that lies between the River Mole and an unnamed stream on the outskirts of Langley Green in Crawley. The site is well used by the public for informal recreation, and it adjoins a rugby club. A considerable amount of tree and hedge planting has been carried out on the site.	0.6 km
Wood near Lower Prestwood Farm	LWS	This woodland is dominated by hornbeam and ash, mainly as trees grown from coppice. There are very few mature standards remaining as most have been felled. Birch and particularly sycamore are also	0.7 km

Table 3.2: Non-Statutory Designated sites within 2km of the Site			
		frequent in some areas. The shrub layer, consisting of several species, forms variable cover and there is a dense species-rich ground flora.	
Woldhurstlea Wood	LWS	Much of this small wood is semi-natural and it has many characteristics of an ancient semi-natural woodland, including a rich ground flora. The birdlife is fairly diverse. There are well-used paths, much enjoyed by the public.	1.0 km
Orltons Copse	LWS	This site consists of two large areas of oak/hornbeam woodland separated by smaller areas of oak/hazel and oak/hazel/ash woodland. There are several small streams throughout and a hay meadow. This mixture of habitats, provides for a rich bird community.	1.0 km
Kilnwood Copse	LWS	This woodland is of variable structure but in the main, it consists of oak and hornbeam. Unusually, Small-leaved Lime is also present throughout. There are two small ponds included but these are over-grown and of little aquatic interest at present.	1.3 km
Ewhurst Wood	LWS	The wood is mostly oak, ash and birch and has good structure and a diverse ground flora. It is of great importance as an area of semi-natural habitat in a heavily built-up area.	1.5 km
Buchan Country Park	LWS	This site is a country park. It consists of an area of woodland with an increasing area of heathland, a small meadow and three large lakes on the south-west edge of Crawley.	1.7 km

3.2 Desk Study: Irreplaceable Habitats

Ancient Woodland

There are five areas along the Site boundary where parcels of woodland listed on the Ancient Woodland Inventory (AWI) adjoin the Site, as displayed in Figure 7.3, Appendix 7. The Ancient Woodland parcels are predominantly off-Site or immediately adjacent to the Site boundary. However there are small areas of overlap with the Site, totalling 0.016 ha located in the south, west and east of the Site where on-Site woodland areas connect to AWI woodland. The habitat survey results indicated that only 0.005 ha met the definition of ancient woodland, with the other areas consisting of scrub, young broadleaved woodland, ruderal vegetation, and grassland habitats. Typically, ancient woodland supports a good variety of native tree species and rich ground flora, including native bluebell in some parcels, which are protected under Schedule 8 of the Wildlife and Countryside Act (WCA) 1981 (as amended).

Veteran Trees

Four veteran pedunculate oak trees are present on the Site, as identified in an Arboricultural Assessment undertaken in March 2021 (WOI-HPA-DOC-AIA-01). Three of the veteran trees are located within the Outline Component and one is located in the Detailed Component. It is worth noting that tree numbers as part of the UKHab survey and presented within this BNG assessment differ to the tree numbers presented within the Arboricultural Assessment. This is due to differing methodologies: UKHab survey records individual trees and considers the surrounding habitat (e.g. trees within scrub or woodland habitat would not be mapped as individual trees), while the Arboricultural Assessment records individual trees based on physical characteristics and development

constraints. This difference is not an issue, as the BNG assessment uses results from the UKHab survey to inform the metric and should not be cross-referenced with the Arboricultural Assessment.

3.3 Desk Study: Habitats of Principal Importance

Habitats of Principal Importance (HPI) within 2 km of the Site are displayed in Figure 7.4, Appendix 7. Lowland mixed deciduous woodland is a Habitat of Principal Importance (HPI) in England, listed on Section 41 of the NERC Act 2006. The lowland mixed deciduous woodland parcels situated in the south of the Site bounding the Ifield Golf Course, and discrete parcels of woodland situated in the west and northern half of the Site, are HPI. Several parcels of woodland identified within Ifield Golf Course are indicated as priority habitat on MAGIC, however, these are in poor condition due to anthropogenic disturbance and damaging management practices, and therefore are not considered to meet the criteria for HPI.

A number of the ponds on the Site meet the HPI criteria as they do (or are likely to) support populations of great crested newts. On-Site ponds are unlikely to meet other HPI criteria.

3.4 Habitat Survey and Condition Assessment

The habitats found on the Site are shown in Figure 1.1.1 and Figure 1.2.1 – 1.2.4 (Appendix 1), and detailed in Appendix 2, with the UKHab type, as determined during the UKHab survey. The condition rating and score of each habitat is also shown with further details provided in Appendix 5.

3.5 Area Based Habitats

Detailed Component

The baseline habitats within the Detailed Component, which covers approximately 29 ha of the whole Site (171 ha), are detailed in Appendix 8. This includes an area of 3.37 ha of overlap between the Detailed and Outline Component which has been included in the assessment of the Detailed Component, as displayed in Appendix 8. These areas are predominantly where land will be utilised for the road construction but may then subsequently be redeveloped as part of the wider development.

Outline Component

The Outline Component, which covers approximately 142 ha (excluding tree canopies) of the whole Site (171 Ha), comprises predominantly agricultural land in the northern and central areas (dominated by arable and cattle grazed pasture fields and with various areas of woodland and scrub), and Ifield Golf Course in the south. A range of area-based habitats are present throughout the Site including grassland, arable land, sparsely vegetated land, woodland, scrub, individual trees, ponds, and small areas of existing buildings and hardstanding. A full description of the habitats on-Site and their condition score can be found in Appendix 2 and Appendix 5.

3.6 Linear Habitats: Hedgerows

Detailed Component

The baseline hedgerows within the Detailed Component, which covers approximately 1.14 km, are detailed in Appendix 8.

Outline Component

The baseline hedgerows situated within the Outline Component, which covers approximately 5.42 km.

There are 34 hedgerows situated within the Outline Component, primarily along arable and grassland field boundaries and around the northern edge of the Ifield Golf Course. Hedgerows are predominantly native and species-poor, although several species-rich hedgerows are present, and hedgerows are often associated with trees. A small number of hedgerows, consisting of (or dominated by) non-

native / ornamental species, are present. There are also 19 lines of trees present, notably within the Ifield Golf Course but also along field boundaries in the northern half of the Site, including some which are considered ecologically valuable.

There is 0.49 km species-rich native hedgerow with trees, 1.48 km native hedgerow with trees, 1.65 km native hedgerow, 1.28 km ecologically valuable line of trees, 0.35 km line of trees, and 0.17 km non-native and ornamental hedgerow. The Site's hedgerows (totalling 5.42 km) are equivalent to 45.93 HU.

3.7 Linear Habitats: Watercourses

3.7.1 Rivers and Streams

Detailed Component

The baseline rivers within the Detailed Component, which covers approximately 0.05 km, are detailed in Appendix 8.

Outline Component

There are four baseline river sections within the Outline Component. As displayed in Appendix 1, Figure 3, the River Mole flows west to east through the northern part of the Site, and Ifield Brook flows south to north along the eastern Site boundary (between the Site and the adjacent Ifield Brook Wood and Meadows LWS). The riparian zone of Ifield Brook exists within the Site boundary. Ifield Mill Stream flows south to north to the east of the Site boundary, connecting to the Ifield Brook. The riparian zone of Ifield Mill Stream falls within the Site boundary. Hyde Hill Brook flows from west to east along part of the southern boundary of the Site and its riparian zone also exists within the Site boundary. There are 4.07 km of rivers and streams within the Site boundary with a total of 50.91 WU.

3.7.2 Ditches

Detailed Component

The baseline ditches within the Detailed Component, which covers approximately 1.13 km, are detailed in Appendix 8.

Outline Component

As displayed in Appendix 1, Figure 3, a series of ditches are present across the Site, including a long unnamed watercourse/ditch which feeds into the River Mole, drainage ditches along hedgerows/line of trees, along field edges and in woodland areas, and a series of 'small drainage channels' in the golf course. Some of these drainage channels on the Ifield Golf Course have been scoped out of having a 5 m riparian zone for the purpose of this assessment due to their small size and lack of connectivity to other drainage features and rivers and are referred to as 'small drainage channels' in this report. In total, there is 5.70 km of ditches, including ditches associated with hedgerows/lines of trees and small drainage channels, equalling 23.01 WU, within the Site boundary.

3.7.3 Riparian Zone Encroachment

Existing UKHab habitats recorded on Site which classify as riparian zone encroachment include buildings, hardstanding, built up areas and gardens, artificial unvegetated unsealed surface, arable fields and modified grassland due to use by grazing cattle.

3.7.4 Watercourse Encroachment

Existing features encroaching upon the watercourses on Site are limited to the concrete footings associated with existing public rights of way (PRoW) comprising footbridges over the River Mole, Ifield Brook and an unnamed watercourse/ditch that feeds into the River Mole. Results of the update RCA for Ifield Mill Stream confirmed 'no encroachment'.

3.8 Trees

Detailed Component

The baseline trees within the Detailed Component are detailed in Appendix 8.

Outline Component

Individual trees are common throughout the Site, although most notably within the Ifield Golf Course and in grassland fields in the northern portion of the Site. Within the Outline Component there are 62 small trees, 66 medium trees and 28 large trees. These typically range from semi-mature to over-mature specimens. Of the large individual trees, three are veteran trees, located in the northern portion of the Site which have been entered into the metric as irreplaceable habitat.

Using the Tree Helper tool within the Metric, the area of these 156 trees is 2.35 ha. This has been included as 'Individual tree – Rural Tree' in the baseline biodiversity assessment, and is shown in Table 3.1. Trees that are located within existing habitats on the Site (which have been quantified under hedgerows or woodland), are evaluated as a component of those habitat types.

3.9 Strategic Significance

3.9.1 Area-based Habitats and Hedgerows

Most of the Site is covered by designations forming part of the Horsham District Nature Recovery Networks (NRN). In addition, much of the Site is covered by Rusper Ridge BOA 36[38], representing a priority area for the delivery of Biodiversity Action Plan (BAP) targets. Much of the Site itself is considered to be of 'High Habitat Potential', and there are also significant areas shown as 'Potential Corridors and Stepping Stones' and / or which lie within the 'Buffer Zones for Core Sites'.

The strategic significance for all baseline area-based habitat parcels and hedgerows within the Site that fall wholly or partially into the 'High Habitat Potential' area has been determined as 'Formally identified in local strategy' (i.e. high strategic significance) using the methodology provided in Section 2.2. The strategic significance for any baseline habitats and hedgerows outside of the 'High Habitat Potential' area within the NRN, have been determined as 'Location ecologically desirable but not in local strategy' (i.e. medium strategic significance). These are displayed in Appendix 1 (Horsham District Council – Draft NRN and Land West of Ifield Map[39], please the 'Strategic Location' boundary is larger than the Site boundary).

3.9.2 Watercourses

Within the Draft NRN and Land West of Ifield map, Horsham District Council have identified the River Mole, Ifield Brook and an unnamed watercourse / ditch running south to north on the Site into the River Mole as 'Potential Corridors and Stepping Stones', which provide a network of wildlife-rich places. Furthermore, Ifield Brook has been recognised by the Sussex Biodiversity Partnership as BOA 37[40], covering the areas where both Ifield Brook and Ifield Mill Stream are located. The River Mole, Ifield Brook, Ifield Mill Stream and Hyde Hill Brook the unnamed watercourse / ditch running south to north on the Site have therefore been determined as 'Formally identified in local strategy = High strategic significance' using the methodology provided in Section 2.2.

For all other ditches, strategic significance was assigned based on whether or not they form part of the Horsham NRN as detailed in Section 3.9.1.

[38] Sussex Biodiversity Partnership (Year unknown). Rusper Ridge Biodiversity Opportunity Area 36.
[39] Horsham District Council (2021). Draft NRN and Land West of Ifield. 08/11/2021.
[40] Sussex Biodiversity Partnership (Year unknown). Ifield Brook Biodiversity Opportunity Area 37.

3.10 Baseline Biodiversity Score

3.10.1 Area-based Habitats

Detailed Component

The ecological baseline score for area-based habitats within the Detailed Component are presented in Appendix 8. The total biodiversity baseline units equal 138.60 BU.

Outline Component

Table 3.1, Appendix 3 details the ecological baseline score for area-based habitats, as determined by the Metric, with the UKHab habitats, their condition rating, distinctiveness, strategic significance listed. The total area within the Outline Component given in the Metric is 141.86 ha and the total habitat area including the area of individual trees is 144.22 ha. The total biodiversity baseline units equal 707.38 BU.

3.10.2 Linear Habitats – Hedgerows

Detailed Component

The ecological baseline score for hedgerows within the Detailed Component are presented in Appendix 8. The total length of hedgerows and lines of trees equal to 15.08 HU.

Outline Component

Table 3.2, Appendix 3 details the ecological baseline score for hedgerow habitats as determined by the Metric, with the UKHab habitats listed. The total length of hedgerows and lines of trees within the Outline Component is 5.42 km, equating to 45.93 HU.

3.10.3 Linear Habitats – Watercourses

Detailed Component

The ecological baseline score for watercourses within the Detailed Component are presented in Appendix 8. The total watercourse units on-Site equal 5.86 WU.

Outline Component

A total of 9.77 km of watercourses are present on-Site comprising rivers, ditches and small drainage channels. The total watercourse units on-Site equal 75.25 WU.

Sections of four rivers are present on-Site totalling 4.07 km, comprising 0.48 km of Hyde Hill Brook, 1.48 km Ifield Brook, 0.05 km of Ifield Mill Stream and 2.06 km of the River Mole.

A total of 30 other watercourses are present on-Site totalling 5.7 km, comprising 20 ditches totalling 4.53 km and 10 small drainage channels totalling 1.17 km.

No other watercourses are present at or within 10 m of the Site.

Table 3.3, Appendix 3 details the ecological baseline score Watercourse Units (WU) for watercourse habitats as determined by the Metric with the distinctiveness, strategic significance, condition rating, watercourse encroachment and riparian encroachment also listed.

4. POST-INTERVENTION BIODIVERSITY WITHIN SITE

This section assesses the post-intervention biodiversity of the Proposed Development and considers the Detailed Component and Outline Component both separately and then in tandem. The opportunities for new and enhanced habitats have been determined based upon the professional judgement of a suitably qualified ecologist (SQE).

4.1 Completed Development Habitats, Habitat Intervention and UKHab Translation

4.1.1 Detailed Component

The post development UKHab habitat types and target habitat types considered within the Detailed Component were decided by Arcadis as determined by the detailed landscape plans for Phase 1 provided by Arcadis. The results are presented within the Arcadis BNG report presented in Appendix 8.

4.1.2 Outline Component

The post-development UKHab habitat types considered within the Outline Component are presented in Table 4.1 as determined by landscape plans provided by Gillespies. The post-development habitat types created by the landscape outline design have been translated into the most appropriate UKHab habitat type, based upon the 'BNG Landscape Areas' document[41] and any necessary adjustments as agreed with the landscape architects, and using the professional judgement of a SQE. The target habitat condition assigned to each UKHab habitat type is captured within the Metric.

Table 4.1: Post Development Landscape – Area-based Habitats and UKHab Translation post-intervention

Open Space Type as per BNG Landscape Areas Document and Landscape Masterplan	Habitat Type 'Split' as per BNG Landscape Areas Document	UKHab Translation (post-intervention)
Semi Natural Open Spaces	34% Marshy/Neutral Grassland (E)* 34% Reedbeds/Wet Grassland (E)* 24% Wood Pasture and Parkland (E)* 4% Scrub and Hedgerow Planting (E) 4% New Broadleaf Woodland* *Habitat enhancement and creation proposed in semi-natural open space areas have been refined since preparation of the landscape plans, such that all habitat enhancement in these areas will be to lowland meadow with additional hedgerow and woodland creation, and new woodland creation will be increased to at least 6% and specifically lowland mixed deciduous woodland as agreed with Gillespies and the Client.	34% Grassland – Lowland Meadow 34% Grassland – Lowland Meadow 24% Grassland – Lowland Meadow 4% Species rich native hedgerow with trees 6% Woodland and forest – lowland mixed deciduous woodland

[41] P12061-00-001-GIL-0782-02 - BNG Areas Table

Open Space Type as per BNG Landscape Areas Document and Landscape Masterplan	**Habitat Type 'Split' as per BNG Landscape Areas Document**	**UKHab Translation (post-intervention)**
Neighbourhood Park 1 – Ridge Park	54% Existing tree groups and understorey planting (E) 20% Amenity Grass 14% Wildflower Meadow 12% Hard Surfaces (including play)	54% Baseline UKHab habitat types (w1g, g3c, g4, s, h3h) 20% Grassland – Modified grassland 14% Grassland – Other neutral grassland 12% Developed land; sealed surface
Neighbourhood Park 2 – Droveway Park	30% Existing line of trees and scrub either side of meadow (E) 15% Amenity Grass 40% Wildflower Meadow 15% Hard Surfaces (including play)	30% Baseline UKHab habitat types (w1f, w1g, g3c, g4, r1a) 15% Grassland – Modified grassland 40% Grassland – Other neutral grassland 15% Developed land; sealed surface
Neighbourhood Park 3 – Grove Sports Hub (excluding sports pitch areas)	35% Amenity Grass 35% Reedbeds/Wet Grassland 25% Existing tree groups and understorey planting 5% Hard Surfaces (including play)	35% Modified grassland 35% Other neutral grassland 25% Baseline UKHab habitat types (w1f, w1g, g3c, g4, r1a) 5% Developed land; sealed surface
Amenity Green Space	50% Amenity Grass 30% Hard Surfaces (including play) 10% Ornamental Planting 10% Native Planting	50% Grassland – modified grassland 30% Developed land; sealed surface 10% Urban – Introduced shrub 10% Heathland and shrub - Mixed scrub
Landscape Managed for Nature Conservation	40% Neutral Grassland 25% Mixed Scrub 35% Existing tree groups and understorey planting	40% Grassland – Other neutral grassland 25% Heathland and shrub – Mixed scrub 35% Baseline UKHab habitat types (w1f, w1g, g3c, g4, r1a)
Plots	70% Hard Surfaces 30% Soft Landscape	70% Developed land; sealed surface 30% Urban – Vegetated Gardens
Ifield Brook Wood and Meadows Buffer	27% Willow Scrub 30% Marshy/Neutral Grassland (E) 20% Existing riparian woodland (E)* 15% SuDS / Wet Meadow 8% Hard surfaces	27% Heathland and shrub - Mixed scrub 30% Grassland - Other Neutral Grassland (as per UKHab baseline) *20% Woodland and forest – other woodland; mixed (as per UKHab baseline)

Open Space Type as per BNG Landscape Areas Document and Landscape Masterplan	Habitat Type 'Split' as per BNG Landscape Areas Document	UKHab Translation (post-intervention)
	* Existing woodland is w1g beside Ifield Brook (it is not classified as 'wet woodland' in UKHab). It has been labelled 'riparian' in the BNG Landscape Areas document as it surrounds a watercourse.	15% Lakes - Ponds (priority habitat) 8% Urban - Developed land; sealed surface
Allotments	N/A	100% Urban – Allotments
Sports Pitches (Grass surfaces)	100% Grass surfaces	100% Grassland – Modified grassland
Sports Pitches (Artificial grass surfaces)	100% Artificial grass surfaces	100% Urban – Artificial unvegetated unsealed surface
Primary Road	73% Hardscape 27% Planted verge**	73% Urban - Developed land; sealed surface 27% Grassland – Other neutral grassland / Urban – sustainable drainage system (50:50 split)
Secondary Road	73% Hardscape 27% Planted verge**	73% Urban - Developed land; sealed surface 27% Grassland – Other neutral grassland / Urban – sustainable drainage system (50:50 split)
Tertiary Roads	68% Hardscape 32% Planted verge**	68% Urban - Developed land; sealed surface 32% Grassland – Other neutral grassland / Urban – sustainable drainage system (50:50 split)

**as per previous discussions with the project landscape architect in December 2022, it was proposed that primary, secondary and tertiary road verges would contain more mixed / biodiverse planting than typical short-mown road verges, and that there would be extensive Sustainable Drainage System (SuDS) ditches. On this basis, it was assumed that planted verges would comprise a 50:50 split of neutral grassland and SuDS.

In addition, other habitats / areas as illustrated on the landscape masterplan are translated as follows:

- 'Play Areas' are translated to 'Urban – artificial unvegetated, unsealed surface';
- Individual sports pitches are translated to either 'Grassland – modified grassland' or 'Urban – artificial unvegetated, unsealed surface';
- Paths / tracks and areas of hardstanding not depicted as road or plots are translated to 'Urban – developed land; sealed surface';
- Area surrounding sports pitches are either 'Grassland – modified grassland' or 'Grassland – other neutral grassland', depending on location and predicted level of use; and
- Areas of land between the edge of the primary road footprint and the outer-most extent of earthworks, where there is no other development proposed, are assumed to be reinstated as 'Grassland – modified grassland' post-development.

Due to the outline nature of the design at the time of writing of this BNG assessment, it is not possible to fully assign or confirm post-development interventions for linear features including hedgerows and

watercourses. Further discussion of the aspirations of the Proposed Development, where known, for hedgerow planting and/or enhancement with watercourse creation and/or enhancement is discussed in Section 4.2.2.

4.2 Post-intervention Biodiversity

The following subsections describe the habitat changes within the Outline Component, based on the Proposed Development. Reference to areas and lengths on-Site within Section 4 and 5 of this report are area and lengths on-Site within the Outline Component only. The habitat changes within the Detailed Component are detailed in Appendix 8.

4.2.1 Impacts to Irreplaceable Habitats and Habitats of Principal Importance

Embedded mitigation for the Proposed Development has included avoidance of priority habitats and protected plants (i.e. native bluebell) where possible, creation of buffers around sensitive on-Site and adjacent habitats (including watercourses and woodland). The loss of all on-Site and off-Site (adjacent) AWI woodland will be avoided through design and micro-siting. However, it has not been possible to avoid all areas of priority habitat, including a number of ponds within the Ifield Golf Course and hedgerows.

The Proposed Development will retain all three veteran trees within the Outline Component. However, the loss of one veteran tree is unavoidable within the Detailed Component. Further details about the wholly exceptional circumstances for the loss of this one veteran tree are included in the Planning Statement which accompanies the planning application.

Where the removal of a single veteran tree is unavoidable, bespoke compensation measures will be implemented within the wider Site to support the retention of ecological function and habitat continuity. As seen in Environmental Statement (ES) Chapter 8: Biodiversity in ES Volume 1, these will include:

- Creation of vertical habitat stacks using sections of the felled veteran tree and associated standing deadwood. These will be cut into large segments and relocated to suitable areas within retained habitats on-Site, where they can decompose naturally, providing valuable invertebrate and fungal habitat.
- Replanting of the main tree stump, including excavation and relocation of the root plate where feasible, to allow continued ecological function in a new position on-Site.
- Artificial veteranisation of selected mid-age trees within adjacent retained habitats to accelerate the development of veteran tree features such as cavities, deadwood, and bark loss.
- Supplementary tree planting, including species known to veteranise more rapidly (e.g., fruit trees), in open areas of the Site to contribute to the long-term continuity of veteran tree habitat features.

These measures are designed to retain ecological value, promote long-term habitat function, and compensate for the unique biodiversity value associated with veteran trees.

4.2.2 Baseline Habitats Permanently Lost to Development in the Outline Component

A large proportion of arable cropland (in the central portion of the Site) and modified grassland (on the Ifield Golf Course) will be permanently lost to development. In addition, smaller parcels of other neutral grassland, introduced shrub, ponds (priority habitat and non-priority habitat), mixed / blackthorn / bramble scrub, tall forbs, vegetated gardens and broadleaved / mixed woodland will be permanently lost.

A number of hedgerows and lines of trees will be wholly or partially lost to development.

The majority of the ditches on the Ifield Golf Course in the south of the Site are intended to be permanently lost.

Based on the tree removal and retention plan and landscape plans provided by Gillespies and as a worse-case scenario, 61 individual trees (2 large, 18 medium, 41 small) as defined according to the UKHab survey and the Statutory Metric user guide, could be removed as a result of the Proposed Development. Some of these trees will definitely be removed and some will potentially be removed subject to detailed design.

4.2.3 Baseline Habitat Retained (No Change) in the Outline Component

In the northern, western and central areas of the Site, areas of broadleaved woodland and the majority of hedgerows, lines of trees and individual trees will be retained. Further retained habitats are present around the edges of the Site, notably to the north and south of Ifield Golf Course. This includes the areas of existing lowland deciduous woodland which would be retained and protected from any development activities.

Based on the tree removal and retention plan and landscape plans provided by Gillespies, 92 trees (23 large, 48 medium, 21 small) as well as three veteran trees are to be retained.

A 25 m buffer between the development and Ifield Brook and its surrounding habitats, including the woodland edge and existing neutral grassland will also be retained.

Additional ancient woodland buffers are proposed, including along the southern edge of Ifield Golf Course. No works will be undertaken within 15 m of the retained ancient woodland.

Hedgerows and lines of trees on the peripheries of the development and all rivers within the Site boundary will also be retained.

To prevent damage to retained habitat, caused by construction activities, all retained woodland, trees, hedgerow, scrub and the stream would be protected by fencing before any construction takes place. Protective fencing would keep machinery away from roots and branches to prevent damage. It is not possible to avoid removing areas of grassland, arable land, certain hedgerows and ditches; this is required to facilitate the Proposed Development.

4.2.4 Baseline Habitat Retained and Enhanced in the Outline Component

Semi Natural Open Space

The intention is to enhance the existing grassland, including 2.08 ha of other neutral grassland and 26.61 ha of modified grassland in the ‘northern fields’ (predominantly north of the River Mole) which is not being lost to development, to lowland meadow in ‘good’ condition. The feasibility of lowland meadow creation is somewhat dependent on the soil nutrient status. As seen in ES Chapter 6: Soil and Agriculture in ES Volume 1, the Site is underlain by soils of the Wickham 1 Association, which comprise fine silty or fine loamy topsoils over slowly permeable clayey subsoils (typical stagnogleys). These soils are common in the Low Weald and are classified as Grade 3b agricultural land, meaning they are not considered Best and Most Versatile (BMV) and are therefore appropriate for habitat creation. While these soils are naturally seasonally waterlogged (Wetness Class IV), drainage improvements (where feasible) could raise their suitability to Wetness Class III, allowing for the successful establishment of lowland meadows. With appropriate management including low nutrient input, hay cutting, and selective seeding, this soil type can support the creation of UKHab ‘Lowland meadow’ habitats. It is worth noting lowland meadow creation has been undertaken successfully by the National Trust in similar habitats[42,43] using wildflower meadow seeds harvested from suitable ‘donor sites’ and sowing it onto new receptor sites. Furthermore, the creation of lowland meadow is

[42] National Trust. North Devon Grasslands Project. Available at: North Devon Grasslands project | National Trust [Accessed March 2025]
[43] National Trust. Cornish Coastal Meadows Project. Available at: Cornish Coastal Meadows Project | National Trust [Accessed March 2025]

deemed appropriate due to the large scale and continuity of the grassland areas in question, and would increase the area of lowland meadow in West Sussex, which has declined significantly over the last century. Early delivery of the lowland meadow in the 'northern fields' will be considered to increase the biodiversity net gain score, but the score is not reliant on early delivery at this stage.

Specific measures required to achieve lowland meadow in good condition will be detailed in a Habitat Management and Monitoring Plan (HMMP) to be produced at detailed design stage and be secured via a planning condition. The initial soil analysis will inform measures required to reduce nutrient levels and treat compacted soils if necessary. To successfully change the characteristics of this area prior to sward enhancement, a change in land use and management is required initially to steer management away from cattle grazing, although a varied vegetational structure can be achieved by light grazing if required. The cessation of detrimental agricultural activities (grazing) in the fields would also improve structural diversity, species richness and reduce nutrient enrichment. To further aid in the reduction of nutrient levels to allow species rich swards to develop, there would be no use of artificial fertilisers or herbicides. An appropriate hay cutting regimes would take place (most likely an annual late-summer cut, but with an earlier spring cut incorporated if required to supress weed growth), with arisings collected to prevent nutrient enrichment. Species diversity would be improved by scarifying and over-sowing with suitable seed is suggested, preferably from a nearby lowland meadow, with the addition of native yellow rattle recommended. Seed transferral using green hay may also be considered. The intention is to retain existing damp areas including ponds and ditches (including any marginal vegetation) in the northern fields within the lowland meadow area, as they are an important feature in lowland meadows and allow for natural flood regimes. The existing hedgerows in this area are also intended to be retained and enhanced. More invasive methods such as localised topsoil removal and turf stripping could be explored if 'soft' enhancement measures are deemed insufficient.

The Design Code submitted with the planning application would also enable for public access to be restricted through footpath design to ensure the Lowland Meadow reaches 'good' condition.

Neighbourhood Parks 1, 2 and 3

The intention is to retain and enhance existing tree groups and their associated habitats in all three Neighbourhood Park areas, and enhance existing ponds in Neighbourhood Park 1 to good condition (as shown in Figure 2.1.1, Appendix 1).

BNG Retained, Nature Conservation Area and Amenity Green Space

To ensure metric trading rules are satisfied for high distinctiveness habitats, 1.24 ha of existing lowland mixed deciduous woodland (LMDW), located along the western Site boundary and south-east Site boundary (T124 and T216, see Appendix 1, Figure 1.2), will be retained and enhanced from 'moderate' to 'good' condition. The woodland is expected to take 20 years to achieve 'good' condition, through long-term management that includes removal of invasive species, reduction of the amount of temporary open space to 0 to 20% by increasing understorey and tree planting, increasing the amount of deadwood throughout 50% of the woodland, planting to ensure three age classes are present, encouraging woodland regeneration by increasing amount of classes present through coppicing and introduction of saplings, and long-term maintenance that encourages the development of three or more storeys.

4.2.5 Habitat Created Post Development in the Outline Component

A variety of different habitat types will be introduced into the Proposed Development Site within the Outline Component, including parcels of LMDW in the west of the Site, introduced shrub and mixed scrub in amenity green space areas, new pond creation, modified grassland and neutral grassland comprising and surrounding the sports pitches and intervening some of the roads/plot areas, neutral grassland and SuDS around new roads, as allotments, vegetated gardens (within residential plots)

and extensive new tree planting. Some of these are described in more detail below and the location is shown on Figure 2.1.1.

Semi Natural Open Space

The intention is to create new parcels of LMDW, approximately 2.45 ha, in the north-west of the Site preferably adjacent to existing LMDW along the northern boundary (some of which is ancient woodland) and undertake any gap filling in the existing woodland, to meet trading rules for high distinctiveness habitats. This will decrease fragmentation within the woodland around the Site boundary and increase connectivity to surrounding areas. This approach will likely promote natural regeneration and successful establishment of LMDW. Whilst a gradual expansion by natural regeneration is best for wildlife, planting will often be necessary to ensure an adequate stocking. An optimal design would be to plant groups, leaving space between them and the existing wood to fill naturally. Choice of species for planting should be informed by similar considerations to planting within the wood[44].

The woodland is expected to take 10 years to establish and reach 'poor' condition, however and ecologically diverse woodland in 'moderate' condition may be achieved through appropriate long-term management for more than 30 years. Habitat management actions include those that:

- Manage woodlands according to the UK Forestry Standard[45];
- Maintain structural diversity with mature trees and scrub of varying age to provide a wide range of habitats. Ensure continuity of woodland by regeneration or replanting when necessary;
- Maintain 'naturalness' of woods where possible, avoiding sudden and drastic modification of woods;
- Maintain woodland 'edge habitat' to encourage a wide variety of flora and fauna;
- Maintain open spaces such as ridges and clearings to provide sheltered sunny areas. This encourages the growth of flowering plants which provide nectar and pollen for insects. If possible, the open areas should include bare ground and low and high vegetation;
- Leave any wet areas such as streams and ponds undisturbed;
- Maintain a range of dead wood, particularly for saproxlyic invertebrates, in both shady and sunny situations. This will also encourage fungi which provide food for invertebrates and birds;
- Maintain the undisturbed soil structure; and
- Allow natural regeneration of woodlands wherever possible[46].

Neighbourhood Parks 1, 2 and 3

The intention is to retain high quality habitats (centred around existing tree groups / woodland) and create new areas of modified grassland and neutral grassland where baseline habitats were lower quality (such as cropland). Modified grassland is not considered likely to achieve above 'poor' condition due to the anticipated high levels of public and visitor pressure once the Proposed Development is complete. Although it will be possible around the margins with a varied cutting regime.

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[44] Forestry Commission (1994). The Management of Semi-natural Woodlands 3. Lowland Mixed Broadleaved Woods. Practice Guide. Available at: https://cdn.forestresearch.gov.uk/2003/01/fcpg003.pdf [Accessed June 2025]

[45] Forestry Commission (2023). The UK Forestry Standard The governments' approach to sustainable forest management. Available at: https://assets.publishing.service.gov.uk/media/651670336a423b0014f4c5c0/Revised_UK_Forestry_Standard_-_effective_October_2024.pdf [Accessed June 2025]

[46] Suffolk's Biodiversity Information Service. Suffolk's Priority Habitats. Available at: https://mail.suffolkbis.org.uk/habitat/lowland-deciduous-woodland [Accessed: June 2025]

The newly created neutral grassland in the Neighbourhood Park areas, will be designed to match the UKHab definition of 'Other neutral grassland', with target species dominant including, but not limited to; common bent *Agrostis capillaris*, false oat-grass *Arrhenatherum elatius*, cocks-foot *Dactylis glomerata,* sweet vernal grass *Anthoxanthum odoratum,* crested dog's tail *Cynosurus cristatus*, lady's smock *Cardamine pratensis,* sorrel *Rumex acetosa,* yarrow *Achillia milliofolium*, meadow buttercup *Ranunculus acris* and ribwort plantain *Plantago lanceolata*. The grassland cover should be between 50% and 70% with forbs up to 50% cover and will be managed in a way to encourage a varied sward height, with any scrub and invasive / broadleaved weeds removed. There will be greater than nine native species per metre square in the newly created grassland. The grassland enhanced from modified grassland to neutral grassland will be managed to achieve tussocky grassland, with a species mix used that will specifically produce grass tussocks. The grassland will provide habitat for a range of invertebrates as well as reptiles and amphibians. It is expected that these areas will be able to achieve a target condition of 'moderate'.

Amenity Greenspace

The intention is to create modified grassland, introduced shrub and mixed scrub habitats in the Amenity Greenspace areas. The newly created scrub would be designed to achieve a 'moderate' target condition. Clearings or glades would be created within the larger areas of scrub with a range and age classes from seedlings to mature shrubs. The scrub should have a well-developed edge with grasses and herbaceous species. The scrub should consist of native species with at least three woody species present with the hazel being dominant. The habitat should be managed to ensure no invasive non-native species are present within the habitat. It is expected that with suitable habitat management such as a varied cutting regime the modified grassland areas will be able to achieve a target condition of 'moderate'.

Landscape Managed for Nature Conservation

In addition to the existing tree groups and their associated habitats, the intention is to create additional areas of mixed scrub and neutral grassland habitat in areas designed and managed primarily for nature conservation. It is expected that these habitats will reach a target condition of 'good'.

Plots

Soft landscaping is anticipated to comprise 30% of new residential plots. These are likely to include urban vegetated gardens, comprising lawns and flower beds.

Ifield Brook Wood and Meadows Buffer

In addition to the retention of existing neutral grassland and woodland, the intention is to create 'SuDS and wet meadow' within the Ifield Brook Wood and Meadows Buffer, along with mixed scrub habitat. The newly created scrub should be designed to achieve a 'moderate' target condition. It has been assumed that the 'SuDS and wet meadow' will, in practice, comprise vegetated new ponds (priority habitat) and reach 'Moderate' condition. The ponds should be created so that they are allowed to naturally fluctuate throughout the year and should not be artificially connected to any ditches, rivers/streams or pipes. In line with the Site Design and Habitat Creation principles for aquatic habitats in the Bird Hazard Management Plan[47], the ponds should be created and managed in way that is less attractive for flocks of birds and large waterfowl. Ponds will be located south of the River Mole, not positioned within large expanses of grassland or arable land, and be located in a sheltered environment (near to the woodland buffer along the eastern edge of the Site or, if this is not feasible, providing new planting screening around them). Ponds would be created as a network of smaller ponds, rather than large expanses of open water, and be made shallow (<1 m at the deepest point) where possible. Aquatic vegetation should cover at least 50% of the surface with some

[47] Bird Hazard Management Plan. Land West of Ifield. Ramboll, July 2021.

areas of open water, and less than 10% of the ponds should be covered with duckweed or filamentous algae. To encourage suitability for amphibians, new ponds should not be artificially stocked with fish. The ponds would provide a valuable habitat for a range of wildlife including invertebrate species, reptiles and amphibians.

Whilst new woodland planting is proposed as part of the Proposed Development this doesn't contradict with the Bird Hazard Management Plan as overall across the Site there is a net loss of woodland when compared with the pre-development conditions.

Primary, Secondary and Tertiary Roads

The intention is to have biodiverse road verges surrounding the primary, secondary and tertiary roads, consisting of neutral grassland and SuDS.

It has been assumed that where earthworks stretch beyond the edge of the primary road footprint, these habitat areas will be lost and then replaced with modified grassland. Modified grassland is considered most appropriate because these areas of earthworks are likely to have been highly disturbed and damaged during construction, and the resulting topography may not be suitable for the creation and appropriate management of habitats of higher distinctiveness.

Allotments and Sports Pitches

Functional community spaces including allotments and recreational sports pitches have been included as part of the landscape masterplan. These areas will include allotments, and modified grassland (grass surfaced sports pitches) and artificial unvegetated unsealed surface (artificial grass surfaced sports pitches).

4.2.6 Trees

As per the Completed Development Landscape Plan (P12061-00-001-GIL-Illustrative Masterplan BNG Areas.dwg) (see Appendix 1), 844 new trees will be planted within the Outline Component, in addition to those retained by the development in the Outline Component. Based on the projected size in 30 years after planting, the high planting densities and the urban setting, tree sizes are predicted to be 'small', although it is possible that some medium trees could be present in the mix, which would improve the biodiversity value of this habitat. Using the Tree Helper tool in the Metric, the estimated area of the newly planted individual trees, based on them all being 'small', is 3.44 ha. This is shown as 'Individual Trees – Urban Trees' in the Metric.

4.2.7 Linear Habitats - Hedgerows

The development, based on Parameter Plan 1 Landscape and Public Realm (by Prior & Partners, WOI-HPA-PLAN-PP01-01, REV P02) (see Appendix 1), is predicted to remove 1.79 km of hedgerows and lines of trees, including 0.3 km of native hedgerow, 0.7 km native hedgerow with trees, 0.16 km of line of trees, 0.46 km ecologically valuable line of trees and 0.17 km non-native and ornamental hedgerow in the outline component.

Existing hedgerows / sections of hedgerows on the Site which are not being lost to development would be enhanced, where feasible, to improve the condition and / or distinctiveness value of these features. Hedgerows which are currently species-poor would be enhanced to species rich hedgerows through the provision of supplementary planting, whereby an existing gaps or sparse sections would be planted with new whips. A suitably diverse range of species should be introduced into existing hedgerows, using native species of local provenance, and taking in consideration climate resilience. Enhanced hedgerows would also be protected from damage through grazing or other activities, to promote the growth of a diverse understorey and create strips of undisturbed land along at least one aspect of every hedgerow. Appropriate management practices would ensure enhanced hedgerows are maintained at a minimum of 1.5 m wide and 1.5 m high, and invasive and non-desirable species would be controlled. In some instances, hedge laying may be appropriate, especially for younger hedges, to improve structure and form in the long-term. Hedgerows will be retained where feasible

in semi natural open spaces, amenity greenspaces and neighbourhood park areas. Where hedgerows are retained an enhanced

Based on the Parameter Plan 1 Landscape and Public Realm, to achieve a net gain of 10% in hedgerows, 1.2 km of new hedgerow should be planted which would comprise 1.2 km of native species-rich hedgerow (currently not shown on landscape drawings). The planting of 1.2 km new hedgerow is considered feasible given the area of the Outline Component. If more hedgerows can be retained than is depicted by the outline parameter plans, the amount of new hedgerow planting required to achieve a 10% net gain could be reduced. The newly created hedgerows would be designed to be of a 'moderate' target condition. The hedgerows should be managed to at least 1.5 m high and 1.5 m wide and be continuous along their length with no gaps. The created hedgerow must have at least five native woody species to classify as 'Native Species-Rich Hedgerow' and should be free of invasive, neophyte and undesirable species. Consideration should also be given to climate-resilient species, for both the woody hedgerow species and any standard tree planting. Newly planted hedgerows will be allowed to grow up and out and would be trimmed back on a three-year rotation, to allow flowers and fruit to grow.

Where possible, new hedgerow planting should consider linking existing hedgerows and other habitats to improve connectivity Site-wide and within the wider area. Combined, the retained, enhanced and proposed new hedgerows detailed above would deliver a total of 67.15 HUs. Not including the proposed new hedgerow, the retained and enhanced hedgerows detailed above would deliver a total of 58.92 HUs.

4.2.8 Linear Habitats – Watercourses

Rivers

At the time of writing of this BNG assessment report the proposed landscaping scheme, flood risk management interventions and construction design are at outline stage. A complete and detailed assessment of the post-development RCA of watercourses including ditches on-site cannot be undertaken at this time.

It can be confirmed that no watercourses have been identified as requiring diversion as part of the development proposals. The development proposals include flood risk management interventions with the potential for works to the riparian zones of the River Mole and Ifield Brook watercourses (and their river channels) to increase the floodplain volume and river flow conveyance capacity.

Existing watercourse details, locations and levels are required and yet to be confirmed by further Site investigations to aid the drainage engineers with their design for discharge connections into the existing watercourses. Preliminary proposals are for two drainage outfalls with headwalls into the River Mole and one drainage outfall with headwall into Hyde Hill Brook.

Once detailed design has been undertaken (including design for roads, structures, drainage, arboriculture and landscape), then update RCA surveys and assessments against Priority River Map criteria will be undertaken. Consequently, the riparian zone encroachment and watercourse encroachment for each watercourse will be re-assessed.

Despite this, the 32 Condition Indicator Scores for all MoRPh5 surveys at each of the watercourses has been reviewed. The negative indicators score reflect human pressures and interventions to the watercourse or riparian zone. Negative indicator scores can be provided to the project team including the water and structure engineers and landscape architects to inform interventions and features that could be incorporated in the detailed project design.

Potential opportunities for improvement in condition scores of watercourses have been identified from the previous RCA and discussed in the paragraphs below; however, are not limited to these opportunities and should be revised using the update RCA findings once available. Consultation with

and consent from the EA will be required for works at and within 8m of the Main Rivers of the River Mole, Ifield Brook and Hyde Hill Brook.

If works within the Local Wildlife site and ancient woodland designations are possible, opportunities for improvement of Ifield Brook from 'Fairly Good' to 'Good' condition are thought to include increasing channel aquatic morphophtyes and increasing the richness of channel bed and channel material natural features.

Identifying detailed opportunities at outline design stage is not possible. However, it is thought that for improvement of the River Mole from 'Fairly Good' to 'Good' condition potential opportunities could include reducing the extent of bank top managed ground cover and reducing the extent of bank face reinforcement and materials. Opportunities for improvement could include increases to bank face naturalness, extent and richness.

Potential opportunities for improvement of Hyde Hill Brook from 'Moderate' to 'Good' condition include reducing the extent of artificial channel margin, bank and bank face artificial features, reducing channel bed siltation and reducing the extent of channel bed filamentous algae, reducing non-native invasive plant species and reduce the bank top managed cover. Opportunities for improvement could include increasing bank top water-related features and increasing the channel margin aquatic vegetation morphotype richness.

Ditches

A proportion of the Site's existing ditches will be permanently lost to development when replaced by built environment including roads, plots and sports pitches. Any existing ditches located in habitat areas to be retained will be retained including the ditch (unnamed watercourse) flowing from north to south from Rusper Road into the River Mole. Any existing ditches situated around the Site peripheries and in retained habitat such as Neighbourhood Park areas and Amenity Greenspaces will be retained.

Based upon the outline parameter plans, a total length of up to 3.80 km of ditches could be permanently lost to the development. A total length of 1.9 km ditches (including an unnamed watercourse/ditch running south to north into the River Mole and 0.15 km of small drainage channels) will be retained. It is predicted that all ditches to be retained can be improved through the following actions to achieve 'moderate' condition through design and management:

- Maintaining good water quality, with clear water (low turbidity) and no pollution.
- Planting a range of emergent, submerged and floating-leaved plants so that there are than 10 species of emergent, floating or submerged plants present in a 20 m ditch length.
- Planting a fringe of aquatic marginal vegetation along more than 75% of the ditch.
- Maintaining less than 10% cover of filamentous algae and or duckweed *Lemna* spp by minimising eutrophication.
- Minimising physical damage to less than 5% of the ditch, by preventing damage from damage from machinery use or storage, or any other damaging management activities.
- Subject to any flood risk restrictions, aaintaining sufficient water levels with a minimum summer depth of approximately 0.5 m in minor ditches and 1 m in main drains.
- Ensure that less than 10% of the ditch is heavily shaded.
- Ensure that there is an absence of floral and faunal invasive non-native species (INNS).

Combined, the retained and enhanced rivers and ditches within the Site, as well as any changes to their riparian zone and watercourse encroachment, would deliver a total of 80.7 WU and a -0.46% net loss. Based on the outline parameter plans, to achieve a 10% net gain in watercourse units, it is recommended that a minimum length of 2.2 km of new ditch, in moderate condition, is created. The

creation of 2.2 km new ditch is considered feasible given the total area of the Outline Component. If more ditches/drainage channels can be retained than is depicted by the outline parameter plans, the amount of new ditch creation required to achieve a 10% net gain could be reduced.

Riparian Zone Encroachment

Post-development habitats which classify as riparian zone encroachment for this Site include modified grassland (sports pitches), developed land, buildings, artificial unvegetated surface, any new habitats in neighbourhood park areas, amenity greenspace areas, play areas, plots, allotments and primary, secondary and tertiary roads.

Watercourse Encroachment

No watercourses have been identified as requiring diversion as part of the development proposals. At this stage in the project with only outline design available, it is understood that watercourse encroachment will be avoided within the channel of watercourses on-Site during construction of roads and other access infrastructure.

The development proposals include flood risk management interventions with the potential for works to the river channels of the River Mole and Ifield Brook watercourses (and their riparian zones) to increase the floodplain volume and river flow conveyance capacity.

Once the detailed design becomes available, update RCA surveys will be undertaken, and assessment of the in-channel works and any proposed engineered features such as bank revetments, headwalls (small or large), or weirs and their encroachment values on the watercourses on-Site will be undertaken.

It has not yet been confirmed if the ditch (unnamed watercourse) flowing from north to south from Rusper Road into the River Mole will either be bridged or culverted beneath a road crossing as part of the Proposed Development. This will be confirmed at detailed design stage. Furthermore, neither the flood risk management works, SuDS features, nor any watercourse/drainage features, have been subject to detailed design. However, a level of watercourse encroachment for existing pedestrian/cycle routes to be enhanced and upgraded and proposed new pedestrian/cycle routes is measured in this assessment. Once detailed design and updated RCAs have been undertaken, then watercourse (and riparian zone encroachment) will be re-assessed.

4.3 Additionality

Habitats subject to additionality exist only within the Outline Component. They have been included in this BNG assessment but only count up to no net loss as described in Section 2.5.6. The whole Site (including both the Detailed and Outline Components) has 845.98 baseline biodiversity units (BU) and achieves 953.38 BU at post-development equivalent to a 12.70% net gain. Mitigation actions within buffer zones around ancient woodland and Hyde Hill Wood LWS can count for no more than 845.98 BU (100%) i.e. up to no net loss. In other words, at least 84.60 BU (10%) should come from other on-Site or off-Site gains or statutory biodiversity credits, outside of any units delivered as part of mitigation actions. In this case, 4.86 BU are being delivered from habitat retention, creation and enhancement in the buffer areas, and the remaining 948.52 BU are being delivered from habitat retention, creation and enhancement outside of mitigation areas. This means that sufficient biodiversity units are coming from habitat creation and enhancement areas not subject to additionality. Details of habitat retention, creation and enhancement subject to additionality are provided in Appendix 9.

4.4 Post-Intervention Summary

Tables 3.1 – 3.3 in Appendix 3 detail the retained post-development habitats and their corresponding biodiversity unit scores. Tables 4.1 – 4.3, Appendix 4 details the created and enhanced post-development habitats and their corresponding biodiversity unit score based on the current landscape plan and as determined by the Metric, with the habitats shown.

5. CALCULATION OF BIODIVERSITY CHANGE

5.1 Quantitative Biodiversity Change

This section details the biodiversity unit changes between the baseline and the post-development Site. Table 5.1 shows the calculation of change for area-based habitats and linear features at the development Site, pre-development and post-development, based on the development plans, with the outcome for biodiversity. The results are summarised for the Detailed Component (as assessed by Arcadis, see Appendix 8), the Outline Component (as assessed by Ramboll) and for the Whole Site, that is for the Detailed and Outline Components combined.

Table 5.1: Baseline Biodiversity, Post-development Biodiversity and Biodiversity Change

Biodiversity Feature	Baseline (area (ha) /length (km))	Baseline Units (BU/HU/WU)	Post-development (area (ha) /length (km))	Post-development (BU/HU/WU)	Outcome
Detailed Component					
Area-based Habitats	30.60 ha*	138.60 BU	30.34 ha*	147.19 BU	+ 6.19 % = Net gain
Hedgerows	1.14 km	15.08 HU	0.87 km	13.86 HU	- 8.10 % = Net loss
Rivers and Ditches	1.2 km	5.90 WU	0.9 km	5.70 WU	- 2.25 % = Net loss
Outline Component					
Area-based Habitats	144.21 ha*	707.38 BU	147.11 ha*	806.20 BU	+ 13.97 % = Net gain
Hedgerows	5.42 km	45.93 HU	3.63 km	45.38 HU	- 1.19% = Net loss **
Rivers and Ditches	9.80 km	75.2 WU	7.50 km	75.9 WU	0.83% = Net gain **
Whole Site (Detailed and Outline Components)					
Area-based Habitats	174.82 ha*	845.98 BU	177.46 ha *	953.38 BU	**+ 12.70 %** **= Net gain**
Hedgerows	6.56 km	61.01 HU	5.70 km	58.92 HU	**- 3.42 %** **= Net loss ****
Rivers and Ditches	11.0 km	81.1 WU	10.5 km	81.6 WU	**- 0.46 %** **= Net loss **

*The total Site area includes trees, which are above other habitat types, so it differs slightly from the area of the Site boundary and baseline area.

** These results reflect hedgerow/watercourse losses, retention and enhancement only, but not creation which would be required to achieve the 10% net gain requirement.

The final change is a 12.70% net gain for area-based habitats, a -3.42% net loss in hedgerows and a -0.46% net loss in watercourses.

Based on the outline parameter plans, a net gain of 10.07% for hedgerows could be achieved if 1.2 km of species-rich native hedgerow (moderate condition) is created. A net gain of 10.14% could be achieved for watercourses if 2.2 km of new ditch (moderate condition) is created. The creation of 1.2 km of new hedgerow and 2.2 km of new ditch is considered feasible given the total area of the

Outline Component. In principle, this is possible and the Site will deliver this at Reserved Matters stage. If more ditches/drainage channels and hedgerows/lines of trees can be retained than is depicted by the outline parameter plans, the amount of new ditch and hedgerow creation required to achieve a 10% net gain could be reduced.

Trading Rules

Trading rules are satisfied for area-based habitats but not for hedgerows or watercourses. If 1.2 km of species-rich native hedgerow is created, as proposed, to achieve a 10.07% net gain for hedgerows, trading rules would be satisfied. Likewise, if 2.2 km of new ditch is created, as proposed to achieve a 10.14% net gain for watercourses, trading rules would be satisfied. These figures are based on the outline parameter plans. If at detailed design stage fewer metres of ditches and hedgerows are removed then the requirements could be adjusted accordingly to achieve at least a 10% net gain.

Additionality

Habitats within the Outline Component that are subject to additionality have been included in this BNG assessment and only count up to no net loss as described in Section 2.5.6.

5.2 Outcomes for Biodiversity

Table 5.2 shows the broad habitat changes for habitats, highlighting where like-for-like or like-for-better compensation has been achieved, as per Principle 6 of the CIEEM Biodiversity Net Gain principles for development along with the overall outcome for the Whole Site (including both the Detailed and Outline Components).

Table 5.2: Baseline Biodiversity for the Whole Site, Post-development Biodiversity and Biodiversity Change per Habitat Group

Total Site Units	Baseline (Pre-development)		Post-development		Overall Change	
Habitat Group	Baseline Area/Length (ha/km)	Baseline Units (BU/HU/WU)	Post-development Area/Length (ha/km)	Post-development Units (BU/HU/WU)	Area Change (ha/km)	BU/HU/WU Change
Whole Site						
Cropland	43.22	95.60	0.17	0.38	-43.05	-95.22
Grassland	91.53	372.09	73.61	606.36	-17.92	234.27
Heathland & Shrub	2.59	25.53	3.49	29.77	0.91	4.24
Lakes	0.31	3.12	0.89	9.47	0.58	6.35
Sparsely Vegetated land	1.17	4.61	0.04	0.19	-1.13	-4.42
Urban	6.24	0.39	72.46	36.61	66.21	36.22
Woodland and Forest	26.13	313.13	20.48	239.57	-5.65	-73.56
Watercourse footprint	0.01	0.00	0.06	0.00	0.05	0.00
Individual trees	3.62	31.52	6.26	31.03	2.64	-0.48
Species-rich native hedgerow with trees	1.26	22.88	1.99	37.03	0.73	14.15
Species-rich native hedgerow	0.00	0.00	1.38	15.57	1.38	15.57
Native hedgerow with trees	1.48	17.22	0.00	0.00	-1.48	-17.22

Total Site Units	Baseline (Pre-development)		Post-development		Overall Change	
Ecologically valuable line of trees	1.28	9.13	0.82	4.99	-0.46	-4.14
Native hedgerow	1.65	9.09	0.00	0.00	-1.65	-9.09
Line of trees	0.61	2.38	0.31	1.33	-0.30	-1.05
Non-native and ornamental hedgerow	0.28	0.31	0.00	0.00	-0.28	-0.31
Other rivers and streams	4.1	52.9	4.1	55.4	0.0	2.4
Ditches	6.8	28.2	4.2	25.3	-2.7	-2.8

Comparisons of the broad habitat groups pre- and post-development show positive gains for high and medium distinctiveness habits grouped in Lakes and Heathland and shrub due to the creation of several new ponds and mixed scrub, which will provide habitat for amphibians and invertebrates. Grassland also sees positive gains due the enhancement of existing grassland and new grassland creation, in particular due to the creation of lowland meadow, which is a high distinctiveness habitat. Positive results are also achieved for low distinctiveness habitats (Urban).

There are losses in groups of other medium distinctiveness habitats (Heathland and Shrub and Woodland and forest) and low distinctiveness habitats (Sparsely Vegetated Land and Cropland). The strategic planting of very high and medium distinctiveness habitats including Grassland and Lowland Meadows, and the resulting surplus of biodiversity units in those habitat groups will assist to compensate for the reduction in the area of the Woodland and forest.

Overall, this assessment has found that it is possible to deliver over a 10% net gain in biodiversity on-Site under the proposed landscape plans for area based habitats via the like-for-like and like-for-better compensatory actions outlined within this report. Options to enable net gains for watercourses and hedgerows have been suggested.

5.3 Qualitative Biodiversity Change

The introduction of new habitats within the development area would bring additional benefits for biodiversity, with features such as ponds providing habitats for amphibians and aquatic invertebrates; woodland and scrub providing habitats for invertebrates, reptiles, amphibians and bats; and wildflower-rich planting providing nectar and pollen suitable for pollinators (which meets with the UK Government's aspirations in the National Pollinator Strategy[48]).

A total of 844 new trees would be delivered as per the Completed Development Landscape Plan [P12061-00-001-GIL-Illustrative Masterplan BNG Areas.dwg] (see Appendix 1) for the Outline Component. This would create a significant gain for biodiversity, both quantitatively and qualitatively. New trees would provide high-value habitats for bats and birds, as well as providing links between adjacent areas of habitat in the wider area.

5.4 Recommendations

Overall, this assessment has demonstrated that it is possible to deliver over the required 10% net gain in biodiversity across the whole Site for area-based habitats under the proposed outline landscaping plans via the like-for-like and like-for-better compensatory actions outlined within this report.

[48] Department for Environment, Food & Rural Affairs, 2018. National Pollinator Strategy: Implementation Plan, 2018-2021 [online]. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/766200/nps-implementation-plan-2018-2021.pdf

Based on the outline parameter plans, to achieve a 10% net gain in hedgerows at least 1.2 km of new native and species-rich hedgerows should be planted, and to reach a 10% net gain in watercourses at least 2.2 km of new ditch in moderate condition should be created. In principle, this is possible and the Site will deliver this at Reserved Matters stage. If at detailed design stage fewer ditches and hedgerows/lines of trees are removed then the requirements could be adjusted accordingly to achieve at least a 10% BNG.

Early delivery of the lowland meadow area in the 'northern fields' could be achieved either by current or existing tenants to get ahead on the land use changes, management regime and seeding. Actions should focus on preparing the area for the creation of this habitat, by ensuring detrimental land management practices, such as cattle grazing are ceased early, so that this habitat can develop in good conditions. This early delivery time would then be factored into the BNG delivery timescales within the Metric which may have a positive outcome on the biodiversity scores. It is worth nothing the score is not reliant on early delivery at this stage.

To ensure metric trading rules are satisfied for high distinctiveness habitats, 1.24 ha of existing LMDW, located along the western Site boundary and south-east Site boundary should be retained and enhanced from 'moderate' to 'good' condition using appropriate management techniques as recommended within this assessment. The woodland is expected to take 20 years to achieve 'good' condition, through long-term management. Additionally, approximately 2.45 ha of new parcels of LMDW, in the north-west of the Site adjacent to existing LMDW along the northern boundary (some of which is ancient woodland) should be created alongside any gap filling in the existing woodland. The enhancement and creation of LMDW has been agreed with the landscape architects.

Where the removal of a single veteran tree is unavoidable, bespoke compensation will be provided through the creation of vertical habitat stacks using sections of the felled trunk and standing deadwood. These will be relocated to retained areas of the Site to decompose naturally and support invertebrate habitat. The main stump and root plate will also be excavated and replanted. Artificial veteranisation of mid-age trees in nearby retained habitats will be undertaken to accelerate the development of veteran features, alongside the planting of new trees, including fruit species known to veteranise more rapidly, to ensure long-term habitat continuity.

Further enhancement and additional benefits for biodiversity could be implemented through landscaping features within the Site. Where feasible and appropriate, features should be created by reusing Site derived material such as felled trees, as seen in Chapter 8: Biodiversity in ES Volume 1.

To ensure the BNG assessment remains robust and reflective of the final development layout, the BNG calculations are required to be updated once detailed designs become available. This will allow for an updated representation of post-development habitats and ensure that the final scheme continues to deliver the required biodiversity gains.

In line with government recommendations for outline planning permissions or development which is to be permitted in phases, additional information that sets out how BNG will be achieved across the whole Site on a phase-by-phase basis would be required and reviewed at each Reserved Matters stage. This would be secured through a suitably worded planning condition which requires approval of a phased BNG plan prior to the commencement of each development phase. Each phase will contribute the required number of units to enable the overall development to realise a 10% net gain. Therefore, cumulatively all phases combined will enable the Proposed Development to realise a 10% net gain.

5.5 Management and Monitoring

To secure 10% BNG, a Phase Biodiversity Net Gain Plan will be developed upfront as a planning condition, setting out how the overall 10% BNG commitment will be achieved across the entire Site. For each subsequent phase, the Phase BNG Plan will be updated and submitted at the Reserved Matters stage, demonstrating how that specific phase will contribute to the overall gain. This phased

approach ensures ongoing delivery and oversight of biodiversity enhancements throughout the Proposed Development.

The BNG commitments for each phase are legally enforceable through appropriate mechanisms to ensure compliance and long-term delivery. A comprehensive management plan will guide habitat creation, enhancement, and ongoing maintenance, including clearly defined roles and responsibilities, funding provisions, and contingencies for adaptive management.

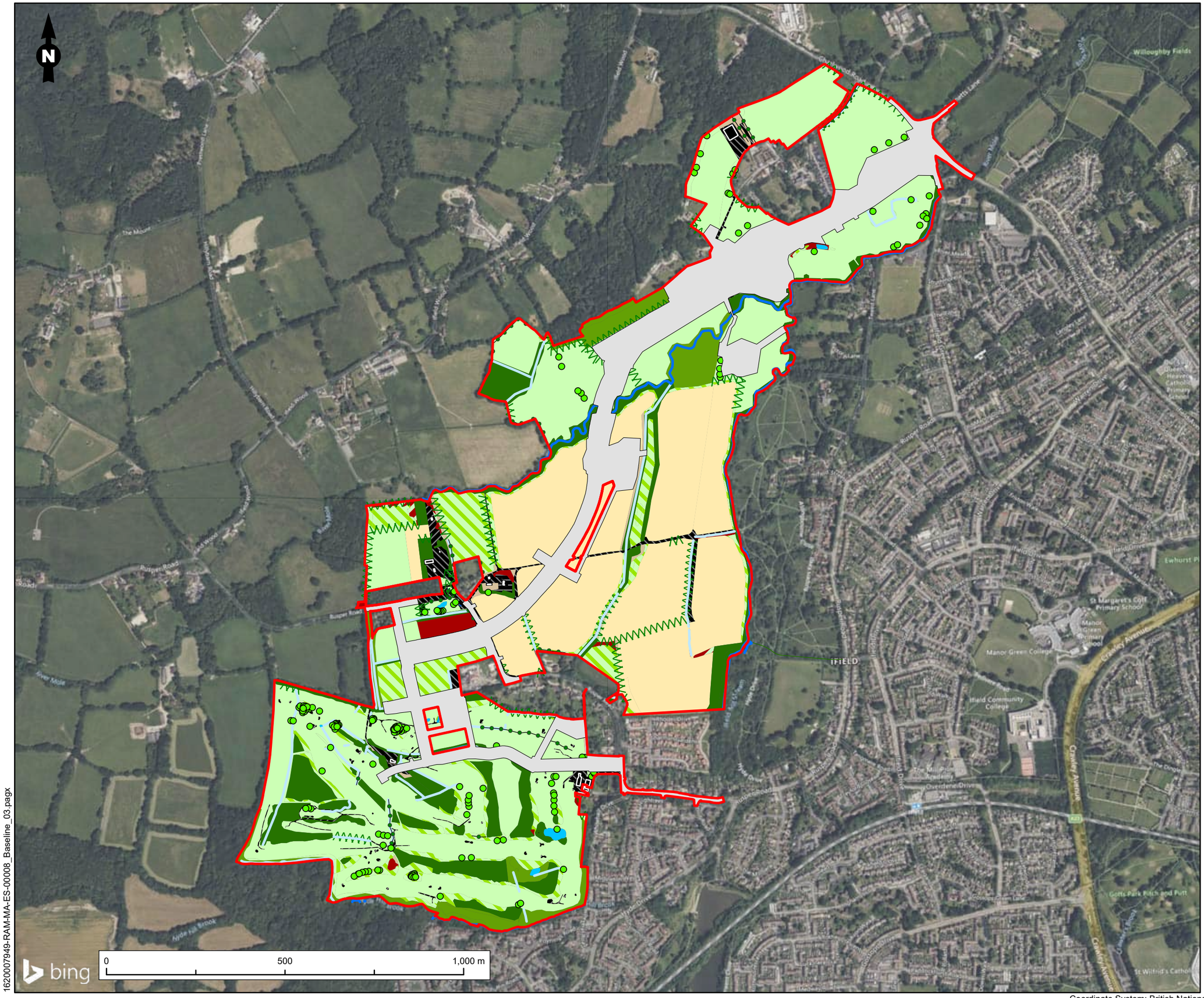
Habitats delivered in the landscape scheme should be planted and sympathetically managed for biodiversity to ensure they develop appropriately managed following the prescriptions of a HMMP. The HMMP would be secured by an appropriate planning condition and will provide a practical guide outlining the measures for the long-term management and monitoring of new, retained and enhanced habitats and installed ecological features suitable for promoting biodiversity. It will include measures to increase the ecological value of the Site following completion of the Proposed Development and for the long term, such as reduced mowing of wildflower grassland areas and avoidance of pesticide. It would be handed over after construction and explained to maintenance company or staff responsible for ongoing management of the Site. The stewardship options for the thirty years of management post-development are unknown at the time of writing. Homes England will confirm stewardship options as the project progresses.

Management and monitoring of the habitats over a 30-year period is required to ensure correct development and management of habitats, in line with BNG principles. The HMMP should be suitable for a 30-year period. Scheduled checks should be undertaken at appropriate intervals, to ensure habitats are establishing correctly along with corrective actions if required. After the initial period it would be advised that it is reviewed and updated. The woodland and grassland in particular would take time to mature, and management would need to be ongoing to ensure that the habitats present develop appropriately and reach their target condition. Monitoring results will inform management actions, allowing for adaptive interventions where necessary to ensure the durability of the BNG across all phases.

5.6 Conclusion

The Proposed Development has been designed to deliver substantial habitat creation and enhancement across the Site. These measures are projected to result in a net gain of 10% for area-based habitats. Overall the calculated change is 12.70% in area based habitats, equating to an increase of approximately107.40 Biodiversity Units. However, the current assessment indicates a net net loss of 3.42% (-2.09 Hedgerow Units) for hedgerows and a -0.46% net loss (-0.37 Watercourse Units) for rivers. Based on the outline parameter plans, these losses can be offset through the creation of approximately 1.2 km of species-rich native hedgerow (moderate condition) which would deliver a net gain of 10.7% for hedgerows. Similarly, the creation of 2.2km of new ditches (moderate condition) within the Outline Component could achieve a 10.14% net gain for watercourses. Given the area available within the Outline Component, these enhancements are considered deliverable. Should fewer existing ditches or hedgerows (or lines of trees) be removed at the detailed design stage, the extent of new habitat creation required to meet the 10% net gain target could be adjusted accordingly.

APPENDIX 1
FIGURES



Legend

- Site Boundary
- Site Boundary (Arcadis)
- Trees
- h2a - Native Hedgerow
- h2b - Non-native and Ornamental Hedgerow
- r1 - Standing Open Water and Canals
- r1g - Other Standing Water
- r2b - Other Rivers and Streams
- w - Woodland and Forest Habitats
- w1g6 - Line of Trees
- w2 - Coniferous Woodland
- c1 - Arable and Horticulture
- g1c - Bracken
- g3c - Other Neutral Grassland
- g4 - Modified Grassland
- h3a - Blackthorn Scrub
- h3d – Bramble Scrub
- h3h - Mixed Scrub
- r1 - Standing Open Water and Canals
- r1a - Eutrophic Standing Water
- s - Sparsely Vegetated Land
- u - Urban
- u1 - Built-Up Areas and Gardens
- u1b - Developed Land, Sealed Surface
- u1b5 - Buildings
- u1c - Artificial Unvegetated Unsealed Surface
- w1f - Lowland Mixed Deciduous Woodland
- w1g - Other Broadleaved Woodland

Figure Title
UKHab Baseline Map

Project Name
West of Ifield

Project No./Filery ID
1620007949-003

Date	Figure No.	Revision
June 2025	1.1.1	1.0

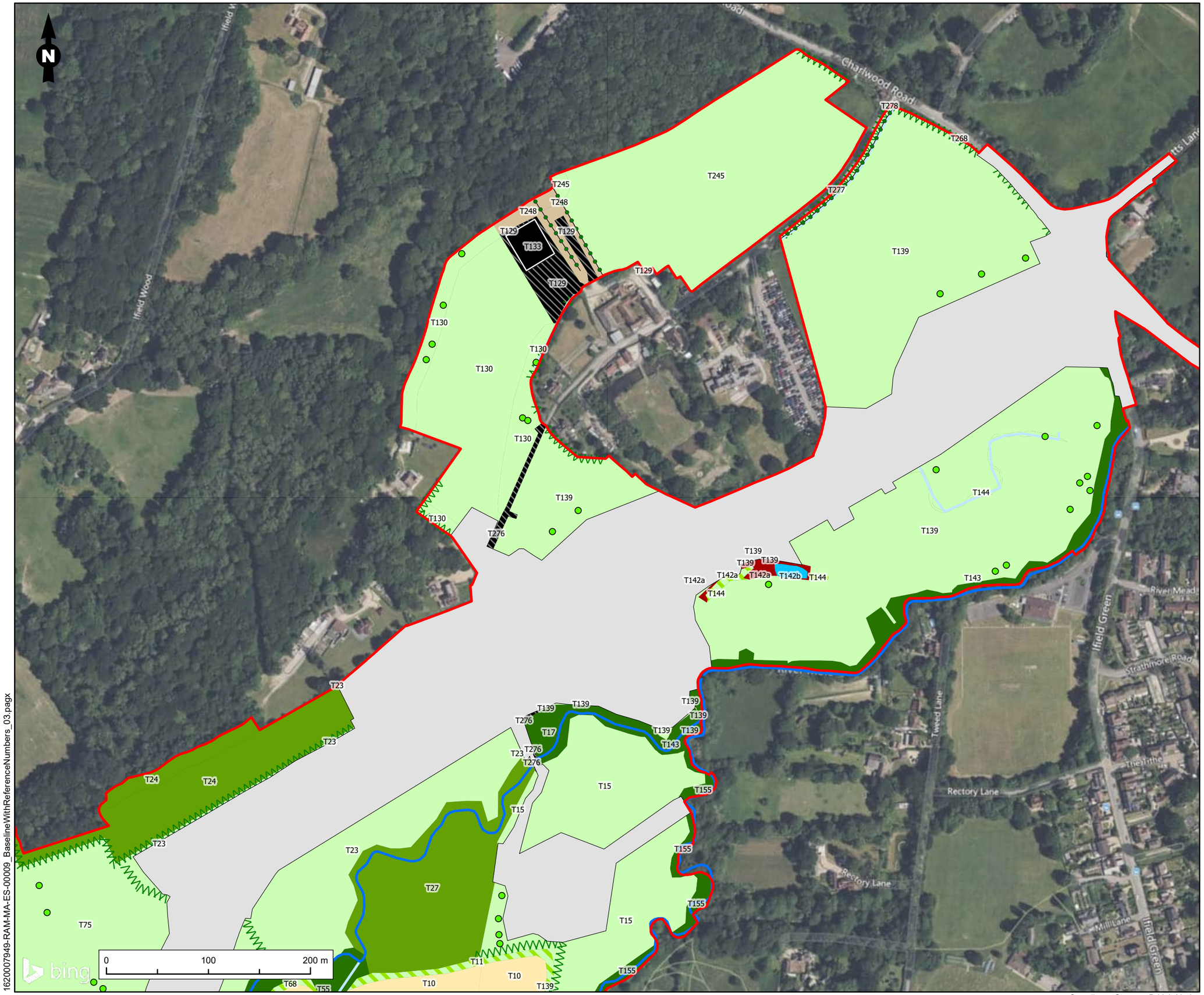
Prepared By	Scale
MFT	1:10,000 @A3

Client
Homes England

RAMBOLL

1620007949-RAM-MA-ES-00008_Baseline_03.pagx

Coordinate System: British National Grid. Projection: Transverse Mercator. Datum: OSGB 1936.



Legend

- Site Boundary
- Site Boundary (Arcadis)
- Trees
- h2a - Native Hedgerow
- h2b - Non-native and Ornamental Hedgerow
- r1g - Other Standing Water
- r2b - Other Rivers and Streams
- w1g6 - Line of Trees
- c1 - Arable and Horticulture
- g3c - Other Neutral Grassland
- g4 - Modified Grassland
- h3h - Mixed Scrub
- r1a - Eutrophic Standing Water
- s - Sparsely Vegetated Land
- u1b - Developed Land, Sealed Surface
- u1b5 - Buildings
- w1f - Lowland Mixed Deciduous Woodland
- w1g - Other Broadleaved Woodland

Figure Title
UKHab Baseline Map with Habitat Reference Numbers

Project Name
West of Ifield

Project No./Filery ID
1620007949-003

Date	Figure No.	Revision
June 2025	1.2.1	1.0

Prepared By	Scale
MFT	1:3,500 @A3

Client
Homes England

RAMBOLL

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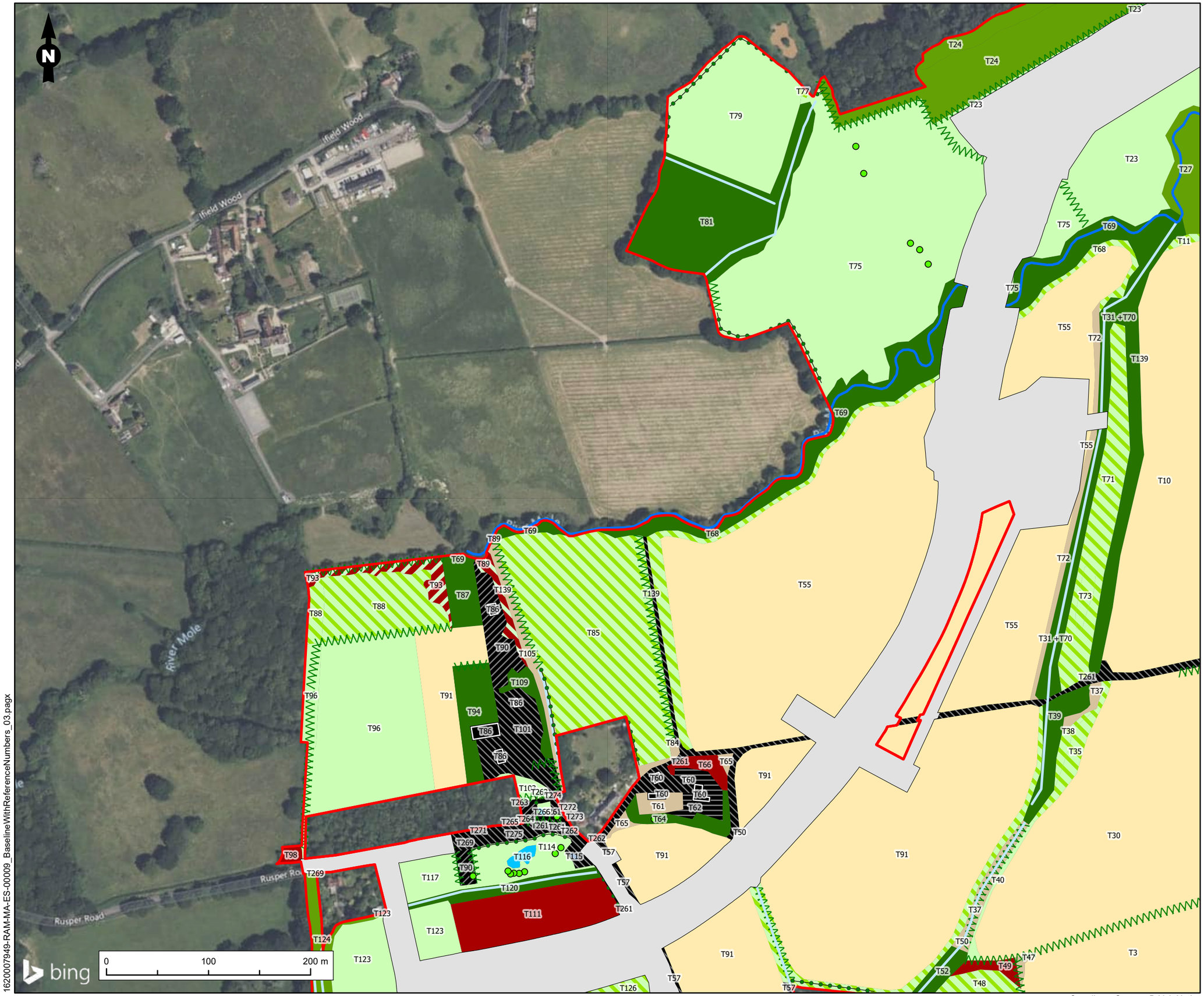

Legend

- Site Boundary
- Site Boundary (Arcadis)
- Trees
- h2a - Native Hedgerow
- h2b - Non-native and Ornamental Hedgerow
- r1g - Other Standing Water
- r2b - Other Rivers and Streams
- w - Woodland and Forest Habitats
- w1g6 - Line of Trees
- w2 - Coniferous Woodland
- c1 - Arable and Horticulture
- g3c - Other Neutral Grassland
- g4 - Modified Grassland
- h3a - Blackthorn Scrub
- h3d – Bramble Scrub
- h3h - Mixed Scrub
- r1 - Standing Open Water and Canals
- r1a - Eutrophic Standing Water
- s - Sparsely Vegetated Land
- u - Urban
- u1 - Built-up Areas and Gardens
- u1b - Developed Land, Sealed Surface
- u1b5 - Buildings
- u1c - Artificial Unvegetated Unsealed Surface
- w1f - Lowland Mixed Deciduous Woodland
- w1g - Other Broadleaved Woodland

Figure Title
UKHab Baseline Map with Habitat Reference Numbers

Project Name
West of Ifield

Project No./Filery ID
1620007949-003

Date	Figure No.	Revision
June 2025	1.2.2	1.0

Prepared By	Scale
MFT	1:3,500 @A3

Client
Homes England

RAMBOLL

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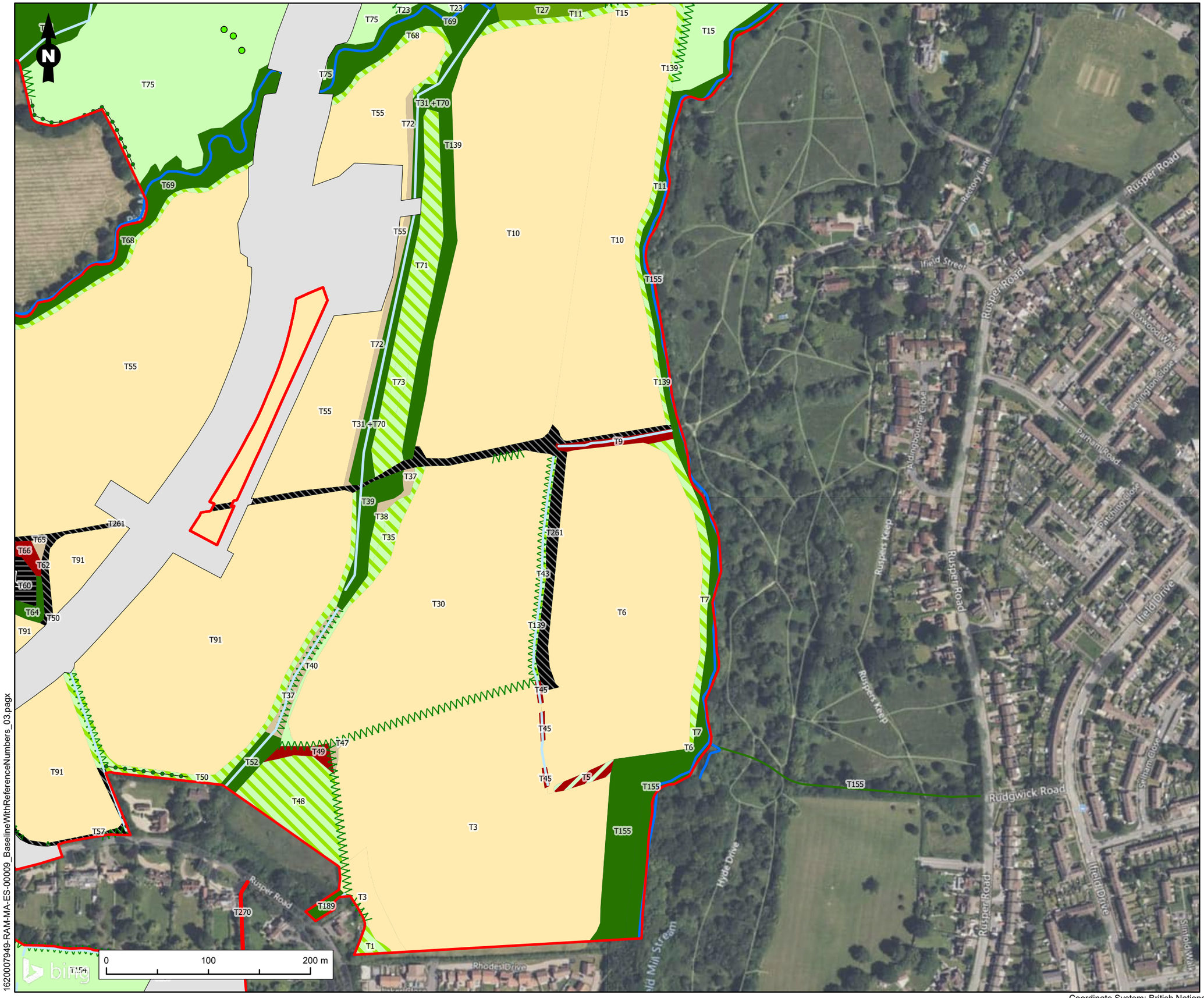

Legend

- Site Boundary
- Site Boundary (Arcadis)
- Trees
- h2a - Native Hedgerow
- r1g - Other Standing Water
- r2b - Other Rivers and Streams
- w1g6 - Line of Trees
- c1 - Arable and Horticulture
- g3c - Other Neutral Grassland
- g4 - Modified Grassland
- h3a - Blackthorn Scrub
- h3h - Mixed Scrub
- s - Sparsely Vegetated Land
- u1 - Built-up Areas and Gardens
- u1b - Developed Land, Sealed Surface
- u1b5 - Buildings
- w1f - Lowland Mixed Deciduous Woodland
- w1g - Other Broadleaved Woodland

Figure Title
UKHab Baseline Map with Habitat Reference Numbers

Project Name
West of Ifield

Project No./Filery ID
1620007949-003

Date	Figure No.	Revision
June 2025	1.2.3	1.0

Prepared By	Scale
MFT	1:3,500 @A3

Client
Homes England

RAMBOLL

1620007949-RAM-MA-ES-00009_BaselineWithReferenceNumbers_03.pagx

Coordinate System: British National Grid. Projection: Transverse Mercator. Datum: OSGB 1936.

Legend

- Site Boundary
- Site Boundary (Arcadis)
- Trees
- h2a - Native Hedgerow
- r1g - Other Standing Water
- r2b - Other Rivers and Streams
- w1g6 - Line of Trees
- c1 - Arable and Horticulture
- g1c - Bracken
- g3c - Other Neutral Grassland
- g4 - Modified Grassland
- h3h - Mixed Scrub
- r1a - Eutrophic Standing Water
- s - Sparsely Vegetated Land
- u - Urban
- u1b - Developed Land, Sealed Surface
- u1b5 - Buildings
- u1c - Artificial Unvegetated Unsealed Surface
- w1f - Lowland Mixed Deciduous Woodland
- w1g - Other Broadleaved Woodland

Figure Title
UKHab Baseline Map with Habitat Reference Numbers

Project Name
West of Ifield

Project No./Filery ID
1620007949-003

Date	Figure No.	Revision
June 2025	1.2.4	1.0

Prepared By	Scale
MFT	1:3,500 @A3

Client
Homes England

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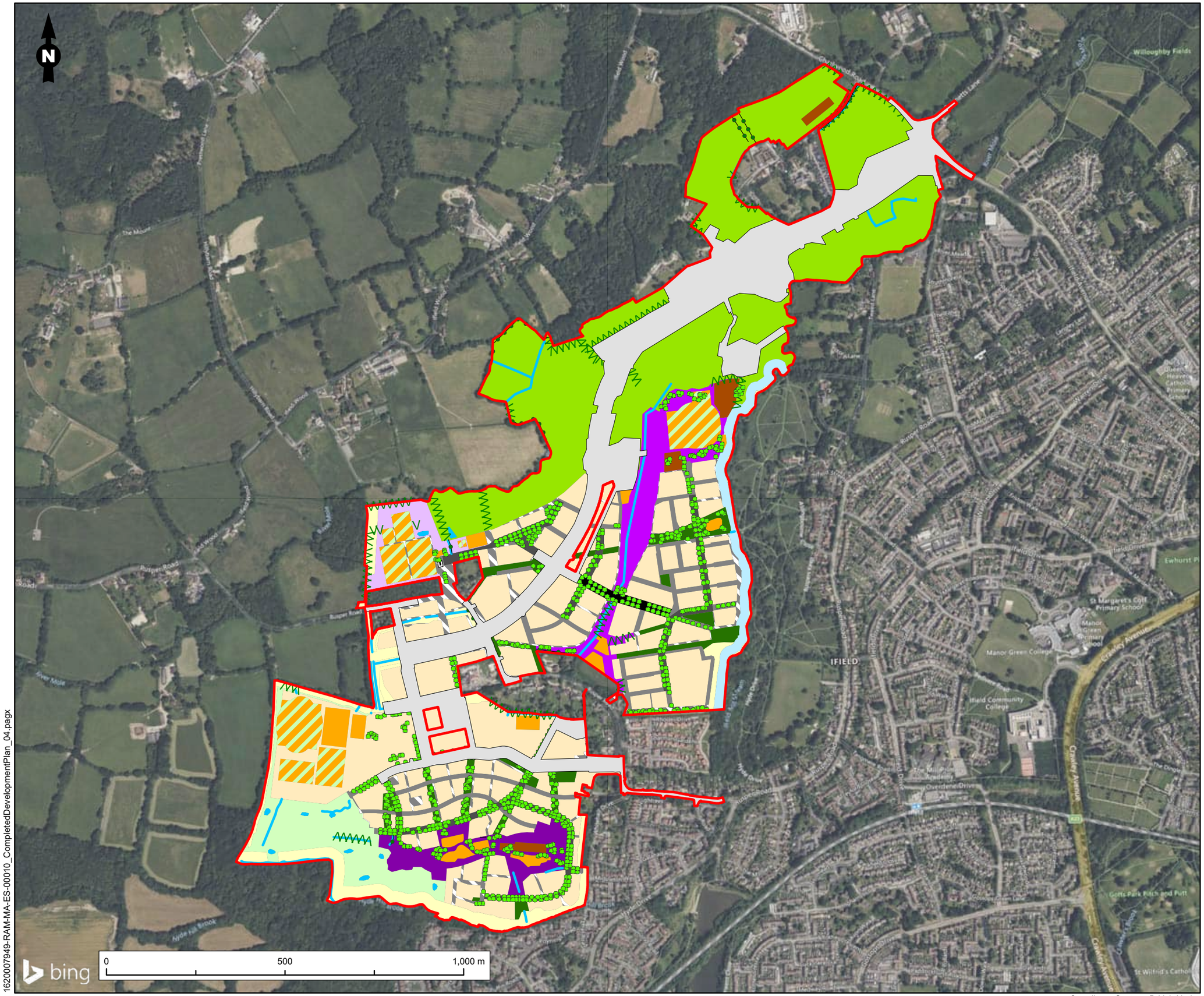

Legend

- Site Boundary
- Site Boundary (Arcadis)
- Trees
- r1g - Other Standing Water
- h2a - Native Hedgerow
- h2b - Non-Native and Ornamental Hedgerow
- w1g6 - Line of Trees
- Allotment
- Amenity Green Space
- BNG Retained
- Building
- Green Space
- Ifield Brook Meadow - 25m Buffer
- Nature Conservation Area
- Neighborhood Parks 1
- Neighborhood Parks 2
- Neighborhood Parks 3
- Play Area
- Play Area - Grass
- Plot
- Relocated Pond
- Road - Primary
- Road - Secondary
- Road - Tertiary
- Surfaced Dev Land

Figure Title
Completed Development Plan

Project Name
West of Ifield

Project No./Filery ID
1620007949-003

Date	Figure No.	Revision
June 2025	2.1.1	1.0

Prepared By	Scale
MFT	1:10,000 @A3

Client
Homes England

RAMBOLL

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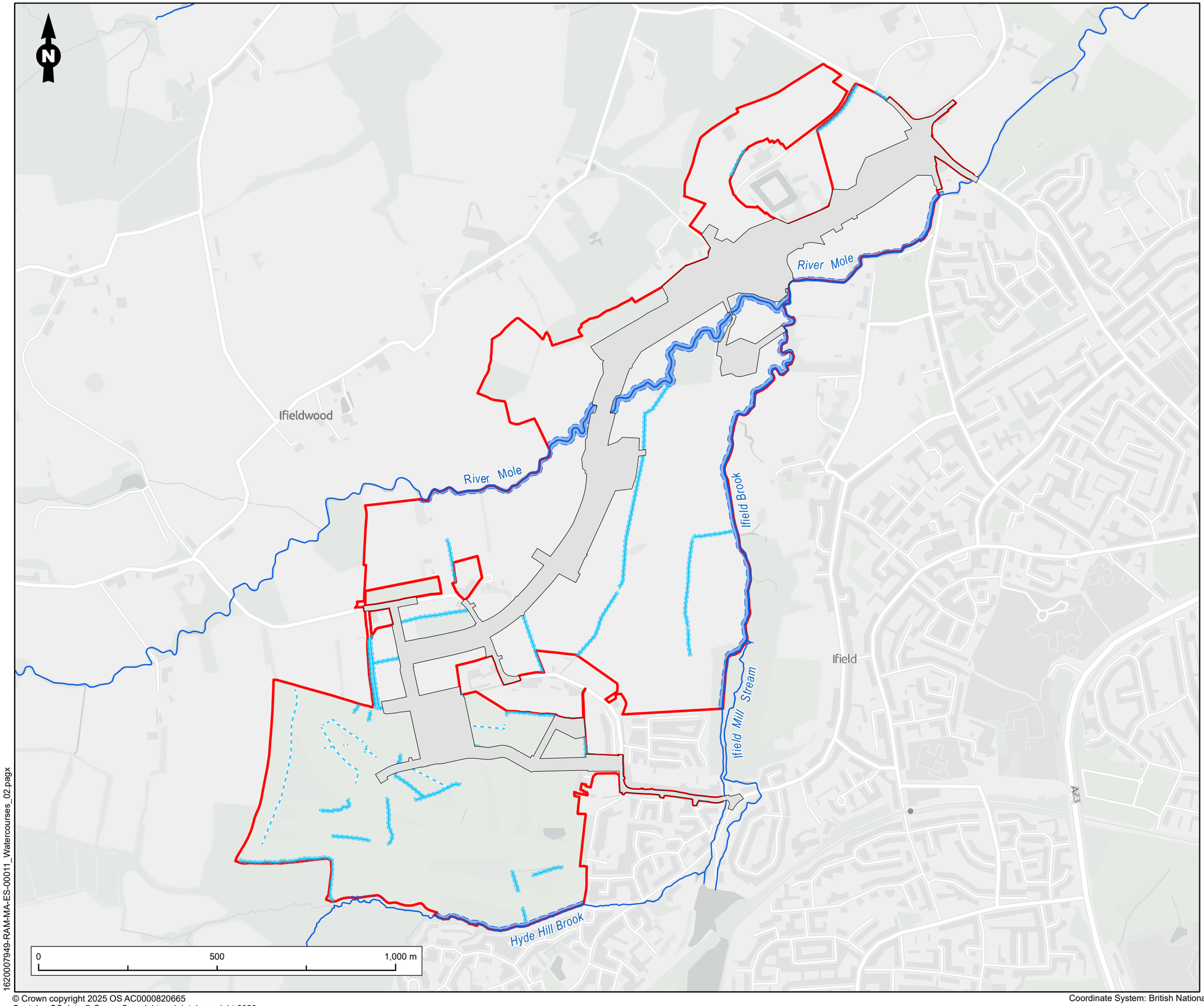


Legend

- Site Boundary
- Site Boundary (Arcadis)
- r2b - Other Rivers and Streams
- 10m Riparian Zone – Other Rivers and Streams (r2b)
- Small Drainage Channel
- 191 - Ditch
- 5m Riparian Zone – Ditch

Figure Title
Watercourses

Project Name
West of Ifield

Project No./Filery ID
1620007949-003

Date	Figure No.	Revision
June 2025	3	1.0

Prepared By	Scale
MFT	1:10,000 @A3

Client
Homes England

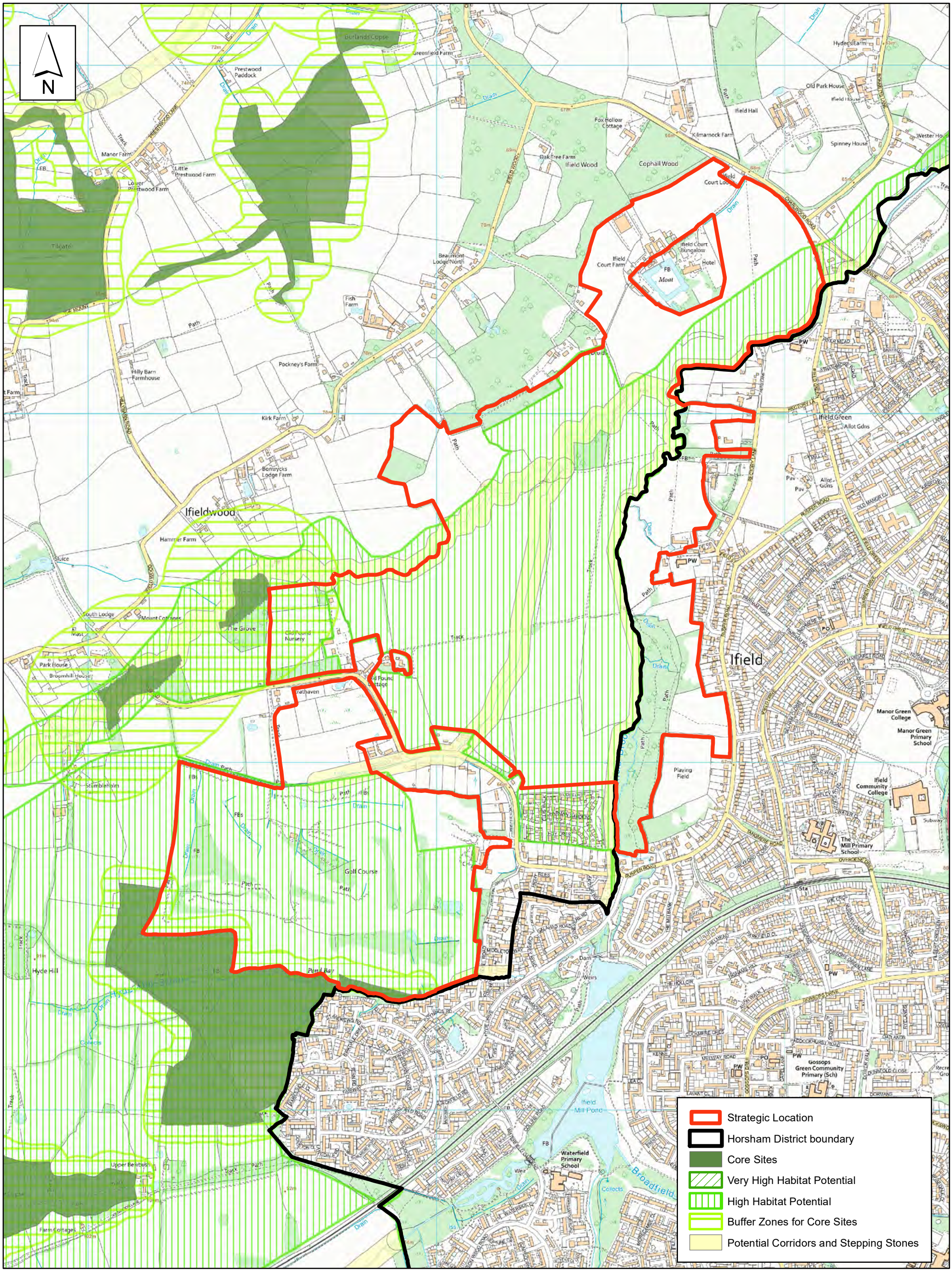
RAMBOLL

1620007949-RAM-MA-ES-00011_Watercourses_02.pagx

Coordinate System: British National Grid. Projection: Transverse Mercator. Datum: OSGB 1936.

Project Name:	West of Ifield
Document Number:	P12061-00-001-GIL-0782
Document Title:	BNG Landscape Areas
Revision:	02
Date:	07.03.2025

Open Space Types	Total Area (sqm)	Habitat Types	New/Retained/Enhanced	Habitat Area (sqm)	Percentage of Total Area
Semi Natural Open Space	538,000	Marshy/Neutral Grassland	E	182,920	34%
		Reedbeds/Wet Grassland	E	182,920	34%
		Wood Pasture & Parkland	E	129,120	24%
		Scrub and Hedgerow Planting	E	21,520	4%
		New Broadleaf Woodland	N	21,520	4%
Neighbourhood Park 1 - Ridge Park	41,500	Amenity Grass	N	8,300	20%
		Wildflower Meadow	N	5,810	14%
		Existing tree groups and understorey planting	E	22,410	54%
		Hard Surfaces (inluding play)	N	4,980	12%
Neighbourhood Park 2 - Meadows Park (Excluding sports pitch areas)	62,700	Amenity Grass	N	9,405	15%
		Wildflower Meadow	N	25,080	40%
		Existing tree groups and understorey planting	E	18,810	30%
		Hard Surfaces (inluding play)	N	10,659	15%
Neighbourhood Park 3 - Grove Sports Hub (Excluding sports pitch areas)	22,900	Amenity Grass	N	8,015	35%
		Reedbeds/Wet Grassland	N	8,015	35%
		Existing tree groups and understorey planting	E	5,725	25%
		Hard surfaces (including play)	N	1,145	5%
Amenity Green Space	48,540	Amenity Grass	N	24,270	50%
		Ornamental Planting	N	4,854	10%
		Native Planting	N	4,854	10%
		Hard Surfaces (inluding play)	N	14,562	30%
Landscape Managed for Nature Conservation	72,230	Neutral Grassland	N	28,892	40%
		Mixed scrub	N	18,058	25%
		Existing tree groups and understorey planting	E	25,281	35%
Plots		Soft Landscape	N		30%
		Hard Surfaces	N		70%
Ifield Meadow Buffer (25m)	28,650	Willow Scrub	N	7735.5	27%
		Marshy/Neutral Grassland	E	8595	30%
		Existing Riparian Woodland	E	5730	20%
		SUDS / Wet Meadow	N	4297.5	15%
		Hard Surfaces	N	2292	8%
Allotments	13,000	N/A	N		100%
Sports Pitches (Grass and artificial grass surfaces)	24,000	Grass Surface	N	N/A	N/A
	12,800	Artificial Sports Surface	N	N/A	N/A
Uncategorised open space	24,362	Existing Woodland, scrub and understorey planting	E		100%
Primary Road		Planted verge	N		27%
		Hardscape	N		73%
Secondary Road		Planted verge	N		27%
		Hardscape	N		73%
Tertiary Road		Planted verge	N		32%
		Hardscape	N		68%



Horsham District Council

Parkside, Chart Way, Horsham
West Sussex RH12 1RL.

Draft NRN and Land West of Ifield

Reference No :		Date : 08/11/2021	Scale : 1:10,000 (at A3)
Drawing No :	Drawn :	Checked :	Revisions :

APPENDIX 2
BASELINE UKHAB DESCRIPTIONS

APPENDIX 2 – BASELINE UKHAB DESCRIPTIONS

The following habitat descriptions are to be read in conjunction with Figure 1.2.1 – 1.2.4 (Baseline UKHab Map) in Appendix 1.

General Site Description

The Site, which covers approximately 171 ha, comprises predominantly agricultural land in the northern and central areas (dominated by arable and grazed pasture fields and with various areas of woodland and scrub), and Ifield Ifield Golf Course in the south. A range of habitats are present throughout the Site including grassland, arable land, woodland, scrub, a network of hedgerows and lines of trees, individual trees, ditches (including land drains) and ponds. The River Mole flows west to east through the northern half of the Site, and Ifield Brook flows south to north along the eastern Site boundary (intervening the Site and the adjacent Ifield Brook Wood & Meadows LWS). Rusper Road passes through the southern half of the Site (passing north of the Ifield Golf Course), and Charlwood Road and Bonnett's Lane form the northern-most extent of the site.

UKHab: w1f – Lowland mixed deciduous woodland

Several distinct parcels of lowland mixed deciduous woodland are present within the Site; a small parcel in the central/northern portion of the Site (associated with the River Mole), a portion located along the north-west Site boundary (which is connected with a larger woodland parcel registered as an Ancient Woodland Inventory (AWI) site), a narrow belt immediately north of the Ifield Golf Course (through the centre of which there is a footpath), a small parcel within a larger area of woodland in the south-east of the Ifield Golf Course, and a continuous belt along the southern / south-eastern / south-western edges of the Ifield Golf Course (part of which is registered as an AWI site). There is a small area (0.005 ha) of AWI woodland present within the Site itself. Further AWI woodland is also present off-Site but adjacent to the boundary, notably in the south-east of the Site (in Ifield Brook Wood and Meadows) and to the west.

Dominant tree species are typically broadleaved and include pedunculate oak *Quercus robur*, ash *Fraxinus excelsior*, hornbeam *Carpinus betulus*, English elm *Ulmus procera*, silver birch *Betula pendula*, beech *Fagus sylvatica*, willow species *Salix sp.* and common lime *Tilia x europaea*. Coniferous species are recorded occasionally, and include Scots pine *Pinus sylvestris* and Douglas fir *Pseudotsuga menziesii*. Several wild service tree *Sorbus torminalis* specimens were recorded in the parcel in the south-east of the Ifield Golf Course. A range of tree age classes is evident across these woodland parcels, ranging from saplings to over-mature specimens. These woodlands typically feature a well-developed understorey with holly *Ilex aquifolium*, hawthorn *Crataegus monogyna*, field maple *Acer campestre*, hazel *Corylus avellana*, blackthorn *Prunus spinosa*, dog rose *Rosa canina* and elder *Sambucus nigra* frequently recorded. The ground flora typically features frequent native bluebell *Hyacinthoides non-scripta*, dog's mercury *Mercurialis perennis* and male fern *Dryopteris filix-mas*, with ground ivy *Glechoma hederacea*, lords-and-adies *Arum maculatum*, tufted hair-grass *Deschampsia cespitosa* and wood avens *Geum urbanum* recorded occasionally. A small stand of cotoneaster (assumed *Cotoneaster horizontalis*) was identified in the narrow belt to the western edge of the Site.

w1g – Other woodland; broadleaved

Numerous other parcels of woodland are present throughout the Site; including large and small stands, narrow strips between field boundaries, woodland belts surrounding watercourses, and numerous other wooded areas within the Ifield Golf Course. These include plantation woodland and semi-natural woodland, and which do not meet the description for lowland mixed deciduous woodland.

A significant proportion of woodland within the Ifield Golf Course is broadleaved and mixed plantation woodland, some of which is relatively young (and hence comprises predominantly single age classes) and some of which is more established. Broadleaved-dominated stands typically comprise pedunculate oak, cherry *Prunus sp.*, willow, Swedish whitebeam *Sorbus intermedia*, hazel, ash, hornbeam, sycamore *Acer pseudoplatanus*, rowan *Sorbus aucuparia*, spindle *Euonymus europaeus*, sweet chestnut *Castanea sativa*, field maple and silver birch, and are species rich in many cases. In mixed stands, coniferous species contribute up to 40% of the total woodland area, but typically less. Plantation woodlands typically have an understorey featuring hawthorn, blackthorn, hazel, rose species *Rosa sp.* and holly, but have a limited ground flora either dominated by bramble *Rubus fruticosus agg.*, common grasses or with relatively bare ground. Butterfly bush *Buddleja davidii* was also recorded in two parcels of plantation woodland within the Ifield Golf Course.

Several parcels of semi-natural woodland are also present within the Ifield Golf Course, which do not meet the description for lowland mixed deciduous woodland and some of which are significantly damaged / disturbed through both human activity and deer browsing. Dominant broadleaved species typically include pedunculate oak and ash, with field maple, hornbeam, hawthorn and willow species occurring frequently. Understoreys are typically composed of rose species, honeysuckle *Lonicera periclymenum*, hawthorn, blackthorn, hazel, holly, willow species and elder. Ground flora, where present, typically includes bramble, common nettle *Urtica dioica*, ivy *Hedera helix*, male fern and common grasses.

A narrow belt of woodland surrounds the River Mole, which flows through the northern half of the Site west to east. This is composed predominantly of ash and pedunculate oak, also with silver birch, hornbeam, field maple, willow species and hawthorn, and with an understorey featuring hawthorn, blackthorn, holly, guelder rose V*iburnum opulus* and field maple. This woodland features several open areas, particularly in the western extent, which are characterised by the presence of scrub, including bramble. The ground flora is generally species-poor and some of these parcels evidence anthropogenic damage / disturbance (resulting from pedestrian / vehicular access).

Several other smaller parcels of broadleaved plantation woodland and semi-natural woodland are present throughout the remainder of the Site, outside of the Ifield Golf Course. In these stands, pedunculate oak and / or ash are most commonly the dominant species, with other species including sycamore, willow species, field maple. Species composition of the understorey is typical of that found elsewhere on the Site, and ground flora is typically species-poor, with common nettle, common hogweed *Heracleum sphondylium*, common grasses and bramble abundant. Within one such stand, in the central portion of the Site, there is a veteran tree (as identified in the Arboricultural Assessment, March 2021; Ref: NJCL 892).

w1g6 – Line of trees

Several lines of trees are present throughout the Site, notably within the Ifield Golf Course but also along field boundaries in the northern half of the Site, and some of which are associated with ditches.

Within the Ifield Golf Course, lines of trees typically comprise broad-leaved species such as pedunculate oak, ash and hornbeam, with occasional coniferous species, and with small-leaved lime *Tilia cordata* recorded in one location. These are typically set within short-cut grassland.

In the remainder of the Site, lines of trees regularly feature a layer of bramble and shrubby trees (such as blackthorn, hawthorn, hazel, holly, ash and rose species) beneath, making these lines of trees a more continuous linear feature and hence ecologically valuable. Tree species are also predominantly broad-leaved species, particularly pedunculate oak, ash and occasional English elm, and with a distinct line of hybrid black poplar *Populus x canadensis* present in one location.

g3c – Other neutral grassland

Discrete areas of other neutral grassland are present across the Site, including fields in the northern, central and western portions of the Site, as well as along arable field margins / between arable fields, and in smaller parcels within the Ifield Golf Course. Due to a prolonged period of extreme drought prior to and during the update UKHab survey, many grassland species were dead / dying at that time and a full species list could therefore not be compiled for all areas of the Site. On this basis, a precautionary approach was adopted whereby observations made during previous habitat surveys conducted at the Site by Ramboll (August – September 2020) and Arcadis (May – July 2018) were taken into account, and grassland was classified as 'other neutral grassland' in some instances where a full species list could not be compiled but local conditions suggested this habitat type.

Thin strips of tall-sward grassland feature around arable field margins, in field corners and around hedgerows, with species including false oat-grass *Arrhenatherum elatius*, common bent *Agrostis capillaris*, Yorkshire fog *Holcus lanatus*, crested dog's-tail *Cynosurus cristatus*, meadow foxtail *Alopecurus pratensis*, tall fescue *Schedonorus arundinaceus*, cock's-foot *Dactylis glomerata* and perennial rye-grass *Lolium perenne*, with variable occurrences of soft rush *Juncus effusus*, common fleabane *Pulicaria dysenterica*, cut-leaved cranesbill *Geranium dissectum*, meadow buttercup *Ranunculus acris*, creeping buttercup *Ranunculus repens*, smooth sow-thistle *Sonchus oleraceus*, creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, common tare *Vicia sativa*, common cat's-ear *Hypochaeris Radicata*, dandelion *Taraxacum agg.*, red bartsia *Odontites vernus*, common hogweed *Heracleum sphondylium*, meadow vetchling *Lathyrus pratensis*, marsh woundwort *Stachys palustris*, common ragwort *Senecio jacobaea*, teasel *Dipsacus fullonum*, ribwort plantain *Plantago lanceolata*, greater plantain *Plantago major*, cuckoo flower *Cardamine pratensis*, bristly ox-tongue *Helminthotheca echioides* and common knapweed *Centaurea nigra*. Some of these areas are becoming increasingly encroached by bramble and self-set saplings, and broad-leaved dock *Rumex obtusifolius* was evident occasionally.

A narrow strip of other neutral grassland exists in the central portion of the Site, surrounded by narrow woodland belts. This features a grassland species composition similar to that recorded in the remainder of the Site, but with soft rush and additional herbaceous species including hairy tare *Vicia hirsuta* and bittersweet *Solanum dulcamara*. To the south of this area, another small field features a similar species composition but with frequent meadowsweet *Filipendula ulmaria* and marsh thistle *Cirsium palustre*.

There are several other smaller fields which are either cut for hay or very lightly grazed by cattle. Species recorded do not vary significantly than that recorded throughout the remainder of the Site, although a recent hay cut made species identification difficult in some instances (in which cases a precautionary approach was undertaken, as described above).

Other neutral grassland within the Ifield Golf Course typically occurs in narrow strips on the edge of woodlands, as well as in mosaics with scattered trees. These areas are characterised by a taller sward height and greater species diversity than that found throughout the remainder of the Ifield Golf Course. The species composition was generally consistent throughout, with species frequently recorded including Yorkshire fog, meadow foxtail, sweet vernal-grass, rough meadow-grass, timothy *Phleum pratense*, common bent and perennial rye-grass, along with occasional to frequent common agrimony *Agrimonia eupatoria*, creeping buttercup, bird's-foot trefoil *Lotus corniculatus*, creeping thistle, creeping cinquefoil *Potentilla reptans*, meadow vetchling, yarrow *Achillea millefolium* and selfheal *Prunella vulgaris*. Minor bramble encroachment was evident in some areas.

g4 – Modified grassland

Significant areas of modified grassland are present across the Site, most notably grazed pasture in the northern and western areas of the Site, the 'greens' and 'fairways' within the Ifield Golf Course and along road verges in the north. These areas are typically characterised by evidence of nutrient enrichment, disturbance and active management through cutting and / or grazing.

Due to a prolonged period of extreme drought prior to and during the update UKHab survey, some grassland and herbaceous species in the fields constituting the northern / north-western portions of the Site were dead / dying at the time of the survey and a full and accurate species list could therefore not be compiled. However, species lists were compiled during previous habitat surveys conducted at the Site by Ramboll (August – September 2020) and Arcadis (May – July 2018). Furthermore, incidental observations were made during a repeat visit to these fields in April 2023. Species recorded throughout areas of grazed pasture in the northern and western areas of the Site include abundant annual meadow-grass *Poa annua*, with frequent meadow foxtail, Yorkshire fog and creeping bent, and occasional perennial rye-grass, and with false brome *Brachypodium sylvaticum* and common couch *Elymus repens* recorded in the margins. There is generally a poor diversity of herbaceous species, with creeping buttercup, broad-leaved dock, dandelion, creeping thistle the most commonly recorded, and indicative of nutrient enrichment. Soft rush and cuckoo flower are present occasionally in damper areas, which includes a narrow depression within the largest field in the north of the Site, several areas in the field to the south-west (immediately north of the River Mole) and the eastern-most field in the northern portion of the Site.

Several other smaller fields to the south-west also comprise modified grassland with a similar species composition to that described above.

A full species list for the greens / fairways on the Ifield Golf Course was not possible given how closely cut this grassland is; however, species which could be identified included perennial rye-grass, Yorkshire fog and annual meadow grass, with occasional selfheal and common daisy *Bellis perennis* also noted.

Further modified grassland lies in the areas surrounding the pavement at Charlwood Road, Ifield Road and Bonnets Lane, in the north of the Site. These areas are dominated by perennial rye-grass, with common speedwell *Veronica persica*, lesser celandine *Ficaria verna*, creeping buttercup and dandelion noted within the sward.

g1c – Bracken

Bracken *Pteridium aquilinum* with scattered common nettle *Urtica dioica* and lords-and-ladies is present occasionally within the Ifield Golf Course, and lies beneath occasional scattered trees along woodland edge areas.

h3h – Mixed scrub

Mixed scrub is relatively frequent throughout the Site, albeit typically in small parcels / strips between grassland margins, woodland edges and along field boundaries. This scrub can be characterised by a mixture of bramble, blackthorn, hazel, elder and hawthorn, with no dominant species. It is also often intermixed with non-woody species such as common hogweed, thistle species, teasel, common nettle and broad-leaved dock.

One larger area identified as mixed scrub contains abundant willow species, which appears self-seeded, and also contains young oak and blackthorn. This area is densely populated although there are several small clearings containing soft rush and marsh thistle, suggesting seasonally wet ground conditions. It is possible that this will develop into woodland if left unmanaged.

h3d – Bramble scrub

One narrow strip of bramble-dominated scrub exists in the west of the Site, with occasional dog rose, nettle, teasel and thistle species also recorded.

h3a – Blackthorn scrub

A dense stand of blackthorn-dominated scrub is also present in the west of the Site, which has spread out from an unmanaged hedgerow along the northern boundary of a field and is likely to completely encroach this field if left unmanaged.

s – Sparsely vegetated land, 17 – Ruderal/ ephemeral

A number of areas of tall ruderal vegetation are present on the Site, typically found surrounding buildings, around the edge of arable fields and skirting hedgerows / lines of trees. Examples of species commonly found within this habitat include common nettle, common hogweed, broad-leaved dock, thistle species, teasel, cow parsley *Anthriscus sylvestris*, cleavers *Galium aparine* and rosebay willowherb *Chamerion angustifolium* (plus other willowherb species). It is likely that some of these areas of tall ruderal vegetation are temporary and will vary year upon year based upon the agricultural regime in those areas.

h2a – Hedgerows (priority habitat)

Approximately 39 hedgerows are present throughout the Site and along the Site boundaries, primarily along arable and grassland field boundaries and around the northern edge of the Ifield Golf Course.

Hedgerows are predominantly native and mostly species-poor, although several species-rich hedgerows are present. The most common woody species include hawthorn, blackthorn, hazel, dog rose, elder and field maple, whilst less frequently recorded woody species include crab apple *Malus sylvestris*, ash, hornbeam, common dogwood *Cornus sanguinea*, holly, willow species and yew *Taxus baccata*. Climbing / understorey species typically include bramble, snowberry *Symphoricarpos albus*, honeysuckle *Lonicera periclymenum*, common gorse *Ulex europaeus* and hedge bindweed *Calystegia sepium*. Non-native rhododendron *Rhododenron ponticum* was identified in one hedgerow to the north of the Site. Ground flora typically includes common grasses and herbs associated with the surrounding and adjacent habitats. Hedgerows with trees commonly feature ash, pedunculate oak and field maple standards, ranging up to mature specimens.

A number of hedgerows are associated with ditches, some of which were dry at the time of the survey (but which are expected to hold water at other times of the year, given the prolonged period of extreme drought prior to and during the update UKHab survey).

Hedgerow management varies across the Site, with several examples where management is infrequent (or hedgerows are neglected). In such cases, hedgerows are likely to lapse or encroached into surrounding habitats if active management is not undertaken.

Three hedgerows within the Site boundary were assessed by Arcadis (October 2019) as 'important' as defined by the Hedgerows Regulations (1997), under the wildlife and landscape criteria. These are present in the central and north-western portions of the Site.

h2b – Other hedgerows

A small number of hedgerows consisting of (or dominated by) non-native / ornamental species, or in some cases composed of Leyland cypress *Cupressus × leylandii*, are present on the Site. One such hedge is predominantly composed of cherry laurel *Prunus laurocerasus*. The understorey of such hedgerows is typically poor to non-existent (i.e. bare ground).

u1a – Developed land; sealed surface

There are numerous areas of hardstanding and developed land throughout the Site. These areas comprise a series of farm tracks, yards, residential areas, roads (in the very north of the Site, and intervening the Ifield Golf Course from the remainder of the Site), and areas around the Ifield Golf Course entrance / buildings.

u1b5 – Buildings

A number of residential and commercial buildings are located on Site. These include a mixture of farm buildings, storage sheds, the Ifield Golf Course, Ifield Golf Course club house / stores and a small number of residential houses.

u1c – Artificial unvegetated, unsealed surface

Some former yards / tracks are unsealed but feature little or no vegetation. This includes areas in the west of the Site, which are recently disturbed.

c1c – Cereal crops

Six large arable fields were recorded within the central portion of the Site. It is understood that these fields supported a barley *Hordeum vulgare* crop at the time of the survey. A small and narrow arable field is also present in the west of the Site.

u – Urban, 1160 – Introduced shrub

Ornamental / introduced shrubs are present in one area of the Site; surrounding buildings associated with the Ifield Ifield Golf Course.

Individual trees

Individual rural trees are common throughout the Site, although most notably within the Ifield Golf Course and in grassland fields in the northern portion of the Site. These typically range from semi-mature to over-mature specimens.

Individual trees in the Ifield Golf Course are, in some cases, planted in clusters (likely as part of a targeted landscaping scheme), typically over managed grassland habitat. These areas do not meet the description for woodland habitat, but may succeed into woodland in the future if the management regime is changed. Specimens within the Ifield Golf Course include pedunculate oak, sycamore, beech, ash, cherry, hornbeam, common lime, silver birch, willow and a number of coniferous species.

In the remainder of the Site, individual trees are predominantly pedunculate oak, with hawthorn and several young fruit trees also recorded in the north and west of the Site.

Three veteran pedunculate oak trees are present within the Outline Component, located in the northern portion of the Site, and there is one veteran tree in the Detailed Component (as identified in the Arboricultural Assessment, March 2021; Ref: NJCL 892).

r1a – Eutrophic standing waters, 19 – Ponds (priority habitat), 39 – Artificial pond

Nine ponds are present within the Site boundary; six of which are present within the Ifield Golf Course; one of which is in the northern portion of the Site; and two in the west of the Site. These ponds ranged in size, and some on the Ifield Golf Course were dry at the time of the survey.

The pond in the north of the Site is set within the largest grazed field and is surrounded by a stock fence, protecting it from grazing pressure. This linear pond is surrounded by trees (including ash, oak, hawthorn and willow) and scrub, and is inundated with soft rush, reedmace *Typha latifolia* and purple loosestrife *Lythrum salicaria*. A large proportion of this ponds appeared to be dry during the survey, however there was standing water throughout most of the eastern half of this feature.

Of the two ponds in the west of the Site, one is surrounded by tall ruderal vegetation and occasional young, scattered trees, and appears to be man-made. The water levels were low at the time of the survey, and there was little evidence of aquatic vegetation. The second is a small and overgrown ornamental pond set within modified grassland and surrounded by shrubs. Aquatic and marginal vegetation include white water-lily *Nymphaea alba* and branched bur-reed *Sparganium erectum*.

The ponds within the Ifield Golf Course are a mixture of man-made ponds in open areas, along with three more natural woodland ponds. Woodland ponds are typically over-shaded and, as such, marginal and aquatic vegetation is scarce. Of the other Ifield Golf Course ponds, one was holding water at the time of the survey, and contained fish. Marginal and aquatic / emergent vegetation was relatively abundant and included soft and hard rush, reedmace, yellow flag *Iris pseudacorus* and white water-lily. The other two ponds were surrounded by scattered trees and were dry at the time of the survey, although rushes, reedmace and water mint *Mentha aquatica* in the dry margins would indicate that these ponds would usually hold water (which is supported by previous habitat survey data). New Zealand pygmyweed *Crassula helmsii* has been identified within these two ponds.

A number of ponds, both on Ifield Golf Course and in the wider Site, contain populations of great crested newts *Trituris cristatus* (GCN) and, as such, are considered priority habitat due to the presence of protected species.

A former pond, now completely dry and inundated with terrestrial vegetation, is present on the western edge of the Site, within the junction between a hedgerow and stands of woodland.

An artificial pond is present in the west of the Site, enclosed by high concrete sides, covered with a mesh and therefore not considered to be of value for wildlife.

r − Standing open water and canals, 191 − Ditch

A series of ditches are present across the Site, which include drainage ditches along hedgerows / line of trees, along field edges and in woodland areas, and a series of 'drainage channels' in the Ifield Golf Course. The longest ditch feature is an unnamed watercourse flowing north to south between fields, joins the River Mole in the central portion of the Site. This feature has been classified as a ditch rather than a river or stream since it is a relatively straight watercourse with shallow banks approximately 2 m wide, and with banks 0.5 − 1 m high. Vegetation along this ditch includes scattered semi-mature / mature trees and dense hedgerows with dense scrub covering the ditch in places, and it passes a woodland at the southern end. The banks and channel bed are clay dominated with no emergent or aquatic vegetation present.

At the time of the survey, most ditches were holding little to no water due to a prolonged period of extreme drought prior to and during the survey. Ditches were therefore assessed on a precautionary basis, and taking into account survey information collected previously by Ramboll (August − September 2020) and Arcadis (May − July 2018).

Most ditches were relatively poorly vegetated within the channel itself, with limited or no evidence of aquatic vegetation at the time of the survey, but typically with terrestrial vegetation (tall ruderal vegetation, coarse grasses and scrub populating the banks). Ditches alongside lines of trees, in woodland and along hedgerows are generally over-shaded and hence feature bare or sparsely vegetated banks, however several ditches along woodland and hedgerow edges in the Ifield Golf Course contain frequent soft rush and occasional reedmace.

Drainage channels in the Ifield Golf Course are small and shallow (no deeper than 1 m and typically less than 1 m wide), feature grassy banks (often short cut) and contained old leaf litter in the channel at the time of the survey.

r2b – Other rivers and streams

The River Mole is a meandering watercourse varying between 2 – 3 m wide and with banks between 3 – 5 m high, flowing west to east through the Site. Vegetation along this watercourse includes semi-mature trees and woodland, and dense scrub in places, whilst the banks are clay dominated with no emergent or aquatic vegetation. The River Mole passes woodlands including those registered on the Ancient Woodland Inventory (AWI). The water was turbid at the time of the RCA surveys, obscuring the channel bed. The River Mole is not shown on Priority Rivers Map but is shown on the Environment Agency Statutory Main Rivers Map.

Ifield Brook is a meandering watercourse flowing south to north, mostly within a mature broadleaved woodland (parts of which are registered on the AWI), along parts of the eastern Site boundary. The brook varies between 2 – 3 m wide and with banks between 3 – 5 m high, with some shallow bank areas. Clay dominated banks with no emergent or aquatic vegetation. Vegetation along the stream includes semi-mature trees and woodland, with dense scrub in places, whilst the banks are clay dominated with no emergent or aquatic vegetation. The water was turbid at the time of the survey, obscuring the channel bed, although a species of freshwater mussel swan mussel *Anodonta cygnea* was incidentally recorded during the survey. Ifield Brook is not shown on the Priority Rivers Map but is shown on the Environment Agency Statutory Main Rivers Map. Part of Ifield Brook lies within Ifield Brook and Meadows Local Wildlife Site (LWS). Ifield Mill Stream flows south to north to the east of the Site boundary, connecting to the Ifield Brook. The riparian zone of Ifield Mill Stream falls within the Site boundary.

Hyde Hill Brook is located off-Site, flowing west to east through mature broadleaved woodland (parts of which are registered on the AWI) forming part of the southern boundary of the Ifield Golf Course. This is a gently meandering watercourse approximately 2 – 3 m wide and with a variable bank height from 0.75 – 4m. Part of Hyde Hill Stream passes rear gardens of residential properties. Hyde Hill Brook is not shown on Priority Rivers Map and eastern end is shown the Environment Agency Statutory Main Rivers Map. Part of Hyde Hill Stream falls within Hyde Hill Woods LWS.

Non-Native Invasive Plant Species

Several Invasive Non-Native Species (INNS) of plants have been identified on the Site. This includes New Zealand pygmyweed within two ponds in the northwest of the Ifield Golf Course, invasive rhododendron in hedgerows in the north of the Site and adjacent to the Ifield Golf Course carpark and cotoneaster (assumed *Cotoneaster horizontalis*) in woodland immediately north of the Ifield Golf Course. Although not listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), cherry laurel is present in a hedgerow and line of trees in the west of the Site and is detrimental to biodiversity as it can degrade habitats such as woodland by shading out the understorey and preventing regeneration of native species. There are additional areas of rhododendron and cherry laurel which have previously been recorded within woodland and hedgerows located off-Site but adjacent to the eastern Site boundary.

Protected Plant Species

Native bluebell is present within several parcels of lowland mixed deciduous woodland on the Site and has also previously been recorded within Ifield Brook and Meadows LWS, which abuts the eastern Site boundary.

APPENDIX 3
BASELINE BIODIVERSITY SCORE

Figure 3.1: Baseline Biodiversity Score, Areas, Distinctiveness, Strategic Significance and Condition Score – Area-based habitats

Broad Habitat	Habitat Type	Area (hectares)	Condition	Total habitat units	Detailed/Outline Component
Cropland	Cereal crops	37.55	Condition Assessment N/A	82.42	Outline
Grassland	Bracken	0.08	Condition Assessment N/A	0.01	Outline
Grassland	Other neutral grassland	3.41	Poor	10.87	Outline
Grassland	Other neutral grassland	8.4	Moderate	53.44	Outline
Grassland	Other neutral grassland	0.64	Good	4.80	Outline
Grassland	Modified grassland	36.54	Poor	62.64	Outline
Grassland	Modified grassland	22.25	Moderate	2.34	Outline
Heathland and shrub	Blackthorn scrub	0.06	Poor	0.12	Outline
Heathland and shrub	Blackthorn scrub	0.2	Moderate	1.55	Outline
Heathland and shrub	Bramble scrub	0.09	Condition Assessment N/A	0.00	Outline
Heathland and shrub	Mixed scrub	0.3	Poor	0.92	Outline

Broad Habitat	Habitat Type	Area (hectares)	Condition	Total habitat units	Detailed / Outline Component
Heathland and shrub	Mixed scrub	0.21	Moderate	1.91	Outline
Heathland and shrub	Mixed scrub	0.73	Good	8.05	Outline
Lakes	Ponds (non-priority habitat)	0.003	Poor	0.01	Outline
Lakes	Ponds (priority habitat)	0.17	Poor	0.07	Outline
Lakes	Ponds (priority habitat)	0.13	Moderate	0.83	Outline
Sparsely vegetated land	Tall forbs	0.67	Poor	1.47	Outline
Sparsely vegetated land	Tall forbs	0.04	Moderate	0.18	Outline
Sparsely vegetated land	Tall forbs	0.39	Good	2.69	Outline
Urban	Introduced shrub	0.02	Condition Assessment N/A	0.04	Outline
Urban	Vegetated garden	0.15	Condition Assessment N/A	0.33	Outline
Urban	Developed land; sealed surface	2.65	N/A - Other	0.00	Outline

Broad Habitat	Habitat Type	Area (hectares)	Condition	Total habitat units	Detailed / Outline Component
Urban	Developed land; sealed surface	0.48	N/A - Other	0.00	Outline
Urban	Artificial unvegetated, unsealed surface	1.09	N/A - Other	0.00	Outline
Woodland and forest	Lowland mixed deciduous woodland	5.74	Good	3.52	Outline
Woodland and forest	Other woodland; broadleaved	1.1	Poor	1.94	Outline
Woodland and forest	Other woodland; broadleaved	15.5	Moderate	66.33	Outline
Woodland and forest	Other woodland; broadleaved	0.65	Good	0.26	Outline
Individual trees	Rural tree	2.24	Moderate	4.88	Outline
Individual trees	Rural tree (Irreplaceable)	0.11	Moderate	0.00	Outline
Woodland and forest	Other woodland; broadleaved	0.04	Moderate	0.35	Outline
Watercourse footprint	Watercourse footprint	0.01	N/A - Other	0.00	Outline
Woodland and forest	Lowland mixed deciduous woodland	1.28	Moderate	0.55	Outline

Broad Habitat	Habitat Type	Area (hectares)	Condition	Total habitat units	Detailed/Outline Component
Woodland and forest	Lowland mixed deciduous woodland (Irreplaecable)	0.005	Moderate	0.00	Outline
Cropland	Cereal crops	0.52	Condition Assessment N/A	1.14	Outline
Grassland	Other neutral grassland	0.02	Moderate	0.18	Outline
Grassland	Modified grassland	0.62	Poor	1.43	Outline
Lakes	Ponds (priority habitat)	0.01	Moderate	0.14	Outline
Urban	Developed land; sealed surface	0.01	N/A - Other	0.00	Outline
Urban	Bare ground	0.01	Poor	0.02	Outline
Woodland and forest	Other woodland; broadleaved	0.1	Moderate	0.92	Outline
Woodland and forest	Other woodland; broadleaved	0.131234	Good	0.15	Detailed
Sparsely vegetated land	Tall forbs	0.019444	Poor	0.03	Detailed
Grassland	Modified grassland	2.0551	Poor	2.77	Detailed

Broad Habitat	Habitat Type	Area (hectares)	Condition	Total habitat units	Detailed/Outline Component
Urban	Artificial unvegetated, unsealed surface	0.061785	N/A - Other	0.00	Detailed
Woodland and forest	Lowland mixed deciduous woodland	0.1312	Good	0.00	Detailed
Woodland and forest	Other woodland; broadleaved	0.58872	Moderate	3.57	Detailed
Grassland	Modified grassland	8.6575	Moderate	35.58	Detailed
Grassland	Other neutral grassland	0.063246	Poor	0.18	Detailed
Sparsely vegetated land	Tall forbs	0.010038	Good	0.01	Detailed
Cropland	Cereal crops	5.124224	Condition Assessment N/A	11.61	Detailed
Urban	Developed land; sealed surface	0.338187	N/A - Other	0.00	Detailed
Grassland	Other neutral grassland	0.374898	Moderate	1.04	Detailed
Heathland and shrub	Mixed scrub	0.3364	Poor	1.55	Detailed
Heathland and shrub	Mixed scrub	0.04995	Moderate	0.46	Detailed

Broad Habitat	Habitat Type	Area (hectares)	Condition	Total habitat units	Detailed/Outline Component
Sparsely vegetated land	Tall forbs	0.0098	Poor	0.02	Detailed
Grassland	Other neutral grassland	0.12644	Poor	0.56	Detailed
Heathland and shrub	Mixed scrub	0.000695	Poor	0.00	Detailed
Heathland and shrub	Mixed scrub	0.610304	Good	8.06	Detailed
Woodland and forest	Other woodland; broadleaved	0.5353	Moderate	4.55	Detailed
Woodland and forest	Lowland mixed deciduous woodland	0.00026	Moderate	0.00	Detailed
Woodland and forest	Other woodland; broadleaved	0.3265	Good	0.62	Detailed
Cropland	Cereal crops	0.027839	Condition Assessment N/A	0.05	Detailed
Grassland	Modified grassland	5.6127	Moderate	21.37	Detailed
Woodland and forest	Lowland mixed deciduous woodland	0.00013	Good	0.00	Detailed
Urban	Artificial unvegetated, unsealed surface	0.070841	N/A - Other	0.00	Detailed

Broad Habitat	Habitat Type	Area (hectares)	Condition	Total habitat units	Detailed/Outline Component
Grassland	Other neutral grassland	1.07677	Moderate	6.79	Detailed
Urban	Developed land; sealed surface	1.3639	N/A - Other	0.00	Detailed
Sparsely vegetated land	Tall forbs	0.027519	Moderate	0.00	Detailed
Grassland	Modified grassland	1.6068	Poor	2.39	Detailed
Individual trees	Rural tree	0.2199	Moderate	1.69	Detailed
Individual trees	Rural tree (Irreplaceable)	0.0366	Good	Any Loss Unacceptable	Detailed
Individual trees	Rural tree	1.0097	Moderate	7.81	Detailed

Figure 3.2: Baseline Biodiversity Score, Lengths, Distinctiveness, Strategic Significance and Condition Score – Hedgerows

Hedge Number	Hedgerow Type	Length (km)	Condition	Total Hedgerow Units	Detailed/Outline Component
T12	Native hedgerow with trees	0.18	Good	2.48	Outline
T22	Native hedgerow with trees	0	Poor	0.00	Outline
T25	Native hedgerow	0.43	Good	2.84	Outline
T26	Species-rich native hedgerow with trees	0.11	Good	2.28	Outline
T33	Native hedgerow	0.03	Good	0.21	Outline
T34	Native hedgerow with trees	0.22	Good	3.04	Outline
T41	Native hedgerow with trees	0.11	Moderate	1.01	Outline
T41	Native hedgerow with trees	0.03	Moderate	0.28	Outline
T42	Native hedgerow with trees	0.08	Moderate	0.74	Outline
T42	Native hedgerow with trees	0.18	Moderate	1.66	Outline

Hedge Number	Hedgerow Type	Length (km)	Condition	Total Hedgerow Units	Detailed/Outline Component
T46	Native hedgerow	0.05	Good	0.35	Outline
T46	Native hedgerow	0.12	Good	0.83	Outline
T53	Line of trees	0.08	Moderate	0.37	Outline
T54	Native hedgerow with trees	0	Moderate	0.00	Outline
T54	Native hedgerow with trees	0.1	Moderate	0.92	Outline
T58	Ecologically valuable line of trees	0.02	Moderate	0.18	Outline
T59	Native hedgerow with trees	0.07	Good	0.97	Outline
T67	Native hedgerow with trees	0.1	Good	1.38	Outline
T67	Native hedgerow with trees	0.1	Good	1.38	Outline
T78	Ecologically valuable line of trees	0.16	Moderate	1.41	Outline
T80	Line of trees	0.03	Moderate	0.13	Outline

Hedge Number	Hedgerow Type	Length (km)	Condition	Total Hedgerow Units	Detailed/Outline Component
T82	Native hedgerow	0.03	Moderate	0.13	Outline
T83	Ecologically valuable line of trees	0.15	Poor	0.66	Outline
T92	Native hedgerow	0.06	Good	0.41	Outline
T92	Native hedgerow	0.08	Good	0.55	Outline
T97	Native hedgerow with trees	0.05	Moderate	0.46	Outline
T99	Native hedgerow	0.15	Moderate	0.69	Outline
T100	Non-native and ornamental hedgerow	0.03	Poor	0.03	Outline
T102	Non-native and ornamental hedgerow	0.05	Poor	0.06	Outline
T104	Non-native and ornamental hedgerow	0.03	Poor	0.03	Outline
T106	Ecologically valuable line of trees	0.04	Moderate	0.37	Outline
T106	Ecologically valuable line of trees	0.05	Moderate	0.46	Outline

Hedge Number	Hedgerow Type	Length (km)	Condition	Total Hedgerow Units	Detailed/Outline Component
T107	Native hedgerow with trees	0.13	Moderate	1.20	Outline
T110	Line of trees	0.05	Poor	0.12	Outline
T223	Ecologically valuable line of trees	0.05	Moderate	0.46	Outline
T223	Ecologically valuable line of trees	0.01	Moderate	0.09	Outline
T121	Line of trees	0.08	Poor	0.18	Outline
T122	Non-native and ornamental hedgerow	0.03	Poor	0.03	Outline
T131	Native hedgerow	0.08	Moderate	0.35	Outline
T135	Native hedgerow	0.04	Poor	0.09	Outline
T146	Native hedgerow	0.15	Good	0.99	Outline
T147	Ecologically valuable line of trees	0.17	Poor	0.75	Outline
T151	Native hedgerow	0.07	Poor	0.15	Outline

Hedge Number	Hedgerow Type	Length (km)	Condition	Total Hedgerow Units	Detailed/Outline Component
T242	Non-native and ornamental hedgerow	0	Poor	0.00	Outline
T46	Native hedgerow	0.05	Good	0.35	Outline
T122	Non-native and ornamental hedgerow	0.03	Poor	0.03	Outline
T246	Native hedgerow	0.17	Moderate	0.75	Outline
T247	Ecologically valuable line of trees	0.1	Poor	0.44	Outline
T247	Ecologically valuable line of trees	0.08	Poor	0.35	Outline
T168	Line of trees	0	Moderate	0.00	Outline
T152	Ecologically valuable line of trees	0.24	Moderate	2.21	Outline
T227	Native hedgerow	0.01	Poor	0.02	Outline
T227	Native hedgerow	0.03	Poor	0.07	Outline
T255	Ecologically valuable line of trees	0.02	Poor	0.09	Outline

Hedge Number	Hedgerow Type	Length (km)	Condition	Total Hedgerow Units	Detailed/Outline Component
T255	Ecologically valuable line of trees	0.02	Poor	0.09	Outline
T162	Species-rich native hedgerow with trees	0.14	Good	2.77	Outline
T162	Species-rich native hedgerow with trees	0.06	Good	1.19	Outline
T175	Native hedgerow	0.06	Poor	0.14	Outline
T182	Species-rich native hedgerow with trees	0.12	Moderate	1.66	Outline
T207	Ecologically valuable line of trees	0.03	Moderate	0.28	Outline
T207	Ecologically valuable line of trees	0.1	Moderate	0.92	Outline
T209	Ecologically valuable line of trees	0.04	Moderate	0.37	Outline
T244	Species-rich native hedgerow with trees	0.06	Good	1.19	Outline
T121	Line of trees	0	Poor	0.00	Outline
T95	Native hedgerow with trees	0.13	Good	1.72	Outline

Hedge Number	Hedgerow Type	Length (km)	Condition	Total Hedgerow Units	Detailed/Outline Component
	Native hedgerow	0.04	Moderate	0.18	Outline
	Line of trees	0.02	Moderate	0.09	Outline
	Line of trees	0.01	Poor	0.02	Outline
	Line of trees	0.08	Moderate	0.32	Outline
T19	Species-rich native hedgerow with trees	0.132273	Good	2.62	Detailed
T21	Species-rich native hedgerow with trees	0.008088	Good	0.16	Detailed
T25	Species-rich native hedgerow with trees	0.007007	Good	0.15	Detailed
T26	Species-rich native hedgerow with trees	0.086189	Good	1.78	Detailed
T54	Species-rich native hedgerow with trees	0.049185	Moderate	0.68	Detailed
T59	Species-rich native hedgerow with trees	0.21825	Good	4.32	Detailed
T131	Species-rich native hedgerow with trees	0.037294	Moderate	0.49	Detailed

Hedge Number	Hedgerow Type	Length (km)	Condition	Total Hedgerow Units	Detailed/Outline Component
T146	Species-rich native hedgerow with trees	0.153109	Good	3.03	Detailed
T161	Species-rich native hedgerow with trees	0.081005	Poor	0.53	Detailed
T162	Species-rich native hedgerow with trees	0.001718	Good	0.03	Detailed
T121	Non-native and ornamental hedgerow	0.080872	Poor	0.09	Detailed
T118	Non-native and ornamental hedgerow	0.026994	Poor	0.03	Detailed
T223	Line of trees	0.116159	Moderate	0.51	Detailed
T168	Line of trees	0.122748	Moderate	0.56	Detailed
T152	Line of trees	0.019845	Moderate	0.09	Detailed

Figure 3.3: Baseline Biodiversity Score, Lengths, Distinctiveness, Strategic Significance and Condition Score – Watercourses

Watercourse Type	Length (km)	Condition	Watercourse Encroachment	Riparian Zone Encroachment	Total Watercourse Units	Detailed/Outline Component
Other rivers and streams	1.48	Fairly Good	Minor	Moderate/ Minor	18.38	Outline
Other rivers and streams	2.06	Fairly Good	Minor	Moderate/ Minor	25.59	Outline
Other rivers and streams	0.48	Fairly Good	No Encroachment	Moderate/ Minor	7.45	Outline
Other rivers and streams	0.05	Fairly Good	No Encroachment	Minor/ Minor	0.82	Outline
Ditches	0.01	Poor	No Encroachment	Major/No Encroachment	0.04	Outline
Ditches	0.1	Poor	No Encroachment	Major/Minor	0.39	Outline
Ditches	0.16	Poor	No Encroachment	Major/Minor	0.62	Outline
Ditches	0.18	Poor	No Encroachment	Minor/ No Encroachment	0.81	Outline
Ditches	0.02	Poor	No Encroachment	Moderate/ No Encroachment	0.08	Outline
Ditches	0.24	Poor	No Encroachment	Major/Major	0.83	Outline

Watercourse Type	Length (km)	Condition	Watercourse Encroachment	Riparian Zone Encroachment	Total Watercourse Units	Detailed/Outline Component
Ditches	0.07	Poor	No Encroachment	Major/Major	0.24	Outline
Ditches	0.08	Moderate	No Encroachment	Major/Minor	0.59	Outline
Ditches	0.02	Poor	No Encroachment	Moderate/ Moderate	0.08	Outline
Ditches	0.05	Poor	No Encroachment	No Encroachment/ No Encroachment	0.22	Outline
Ditches	0.06	Poor	No Encroachment	Major/Minor	0.23	Outline
Ditches	0.12	Poor	No Encroachment	Minor/ No Encroachment	0.52	Outline
Ditches	0.22	Poor	No Encroachment	Moderate/ Minor	0.87	Outline
Ditches	0.23	Poor	No Encroachment	Major/Major	0.79	Outline
Ditches	0.59	Poor	Minor	Minor/ Minor	2.06	Outline
Ditches	0.15	Poor	No Encroachment	No Encroachment/ No Encroachment	0.69	Outline
Ditches	0.3	Poor	No Encroachment	No Encroachment/ No Encroachment	1.38	Outline

Watercourse Type	Length (km)	Condition	Watercourse Encroachment	Riparian Zone Encroachment	Total Watercourse Units	Detailed/Outline Component
Ditches	0	Poor	No Encroachment	No Encroachment/ No Encroachment	0.00	Outline
Ditches	0.14	Poor	No Encroachment	No Encroachment/ No Encroachment	0.64	Outline
Ditches	0.02	Poor	No Encroachment	No Encroachment/ No Encroachment	0.09	Outline
Ditches	0.07	Poor	No Encroachment	No Encroachment/ No Encroachment	0.32	Outline
Ditches	0.12	Poor	No Encroachment	No Encroachment/ No Encroachment	0.55	Outline
Ditches	0.2	Poor	No Encroachment	No Encroachment/ No Encroachment	0.92	Outline
Ditches	0.11	Poor	No Encroachment	No Encroachment/ No Encroachment	0.51	Outline
Ditches	0.01	Poor	No Encroachment	No Encroachment/ No Encroachment	0.05	Outline
Ditches	0.02	Poor	No Encroachment	Moderate/ Moderate	0.08	Outline
Ditches	0.1	Poor	No Encroachment	Major/Major	0.35	Outline
Ditches	0.38	Poor	No Encroachment	Moderate/ No Encroachment	1.61	Outline

Watercourse Type	Length (km)	Condition	Watercourse Encroachment	Riparian Zone Encroachment	Total Watercourse Units	Detailed/Outline Component
Ditches	0.03	Poor	No Encroachment	Major/Major	0.10	Outline
Ditches	0.1	Poor	No Encroachment	Major/Major	0.35	Outline
Ditches	0.06	Poor	No Encroachment	Major/Moderate	0.22	Outline
Ditches	0.05	Poor	No Encroachment	Moderate/ Minor	0.21	Outline
Ditches	0.01	Poor	No Encroachment	No Encroachment/ No Encroachment	0.05	Outline
Ditches	0.03	Poor	No Encroachment	Minor/ No Encroachment	0.14	Outline
Ditches	0.03	Poor	No Encroachment	Major/Minor	0.12	Outline
Ditches	0.02	Poor	No Encroachment	Major/Minor	0.08	Outline
Ditches	0.13	Poor	No Encroachment	Major/Major	0.45	Outline
Ditches	0.1	Poor	No Encroachment	Major/Major	0.35	Outline
Ditches	0.03	Poor	No Encroachment	No Encroachment/ No Encroachment	0.14	Outline

Watercourse Type	Length (km)	Condition	Watercourse Encroachment	Riparian Zone Encroachment	Total Watercourse Units	Detailed/Outline Component
Ditches	0.11	Poor	No Encroachment	No Encroachment/ No Encroachment	0.51	Outline
Ditches	0.02	Poor	No Encroachment	Major/Major	0.07	Outline
Ditches	0.14	Poor	No Encroachment	Major/Moderate	0.49	Outline
Ditches	0.05	Poor	No Encroachment	Major/Moderate	0.18	Outline
Ditches	0.17	Poor	No Encroachment	Major/Major	0.59	Outline
Ditches	0.08	Poor	No Encroachment	Major/Major	0.28	Outline
Ditches	0.07	Poor	No Encroachment	Major/No Encroachment	0.27	Outline
Ditches	0.13	Poor	No Encroachment	No Encroachment/ No Encroachment	0.57	Outline
Ditches	0.06	Poor	No Encroachment	No Encroachment/ No Encroachment	0.26	Outline
Ditches	0.32	Poor	No Encroachment	Moderate/ Minor	1.27	Outline
Ditches	0.07	Poor	No Encroachment	Major/No Encroachment	0.27	Outline

Watercourse Type	Length (km)	Condition	Watercourse Encroachment	Riparian Zone Encroachment	Total Watercourse Units	Detailed/Outline Component
Ditches	0.04	Poor	No Encroachment	No Encroachment/ No Encroachment	0.18	Outline
Ditches	0.08	Poor	No Encroachment	Moderate/ No Encroachment	0.34	Outline
Ditches	0.050888	Poor	No Encroachment	Major/Major	0.18	Detailed
Ditches	0.021248	Poor	No Encroachment	No Encroachment/ No Encroachment	0.09	Detailed
Ditches	0.24156	Poor	No Encroachment	Moderate/ No Encroachment	0.98	Detailed
Ditches	0.095554	Poor	No Encroachment	Major/Major	0.32	Detailed
Ditches	0.034262	Poor	No Encroachment	No Encroachment/ No Encroachment	0.16	Detailed
Ditches	0.10037	Poor	No Encroachment	Major/Moderate	0.37	Detailed
Ditches	0.002075	Poor	No Encroachment	Major/Major	0.01	Detailed
Ditches	0.020316	Poor	No Encroachment	Major/Major	0.07	Detailed
Ditches	0.035877	Poor	No Encroachment	No Encroachment/ No Encroachment	0.17	Detailed

Watercourse Type	Length (km)	Condition	Watercourse Encroachment	Riparian Zone Encroachment	Total Watercourse Units	Detailed/Outline Component
Ditches	0.222322	Poor	No Encroachment	Minor/ No Encroachment	0.96	Detailed
Ditches	0.151478	Poor	No Encroachment	No Encroachment/ No Encroachment	0.70	Detailed
Ditches	0.045314	Poor	No Encroachment	Minor/ Minor	0.19	Detailed
Other rivers and streams	0.054	Fairly Good	Minor	Moderate/ Minor	0.67	Detailed
Ditches	0.076969	Moderate	No Encroachment	No Encroachment/ No Encroachment	0.71	Detailed
Ditches	0.004444	Moderate	No Encroachment	No Encroachment/ No Encroachment	0.04	Detailed
Ditches	0.016216	Moderate	No Encroachment	Minor/ No Encroachment	0.15	Detailed
Ditches	0.013364	Moderate	No Encroachment	Minor/ No Encroachment	0.12	Detailed

APPENDIX 4
POST DEVELOPMENT BIODIVERSITY SCORE

Table 4.1: Post-development Habitats, Habitat Action and Units Delivered – Area-based habitats

Broad Habitat	Proposed Habitat Type	Area (hectares)	Condition	Habitat Intervention	Total Biodiversity Units Delivered	Detailed / Outlined Component
Cropland	Cereal crops	0.085	Condition Assessment N/A	Retained	0.19	Outline
Grassland	Bracken	0.077	Condition Assessment N/A	Retained	0.18	Outline
Grassland	Other neutral grassland	1.047	Poor	Retained	4.82	Outline
Grassland	Other neutral grassland	0.512	Moderate	Retained	4.71	Outline
Grassland	Other neutral grassland	0.292	Good	Retained	4.03	Outline
Grassland	Modified grassland	4.412	Poor	Retained	10.15	Outline
Heathland and shrub	Blackthorn scrub	0.035	Poor	Retained	0.16	Outline
Heathland and shrub	Blackthorn scrub	0.031	Moderate	Retained	0.29	Outline

Broad Habitat	Proposed Habitat Type	Area (hectares)	Condition	Habitat Intervention	Total Biodiversity Units Delivered	Detailed / Outlined Component
Heathland and shrub	Bramble scrub	0.09	Condition Assessment N/A	Retained	0.40	Outline
Heathland and shrub	Mixed scrub	0.1	Poor	Retained	0.46	Outline
Heathland and shrub	Mixed scrub	0.002	Moderate	Retained	0.02	Outline
Heathland and shrub	Mixed scrub	0.12	Good	Retained	1.58	Outline
Lakes	Ponds (priority habitat)	0.07	Moderate	Retained	0.97	Outline
Urban	Developed land; sealed surface	0.44	N/A - Other	Retained	0.00	Outline
Urban	Developed land; sealed surface	0.15	N/A - Other	Retained	0.00	Outline
Urban	Artificial unvegetated, unsealed surface	0.03	N/A - Other	Retained	0.00	Outline
Woodland and forest	Lowland mixed deciduous woodland	5.57	Good	Retained	115.30	Outline

Broad Habitat	Proposed Habitat Type	Area (hectares)	Condition	Habitat Intervention	Total Biodiversity Units Delivered	Detailed / Outlined Component
Woodland and forest	Other woodland; broadleaved	0.492	Poor	Retained	2.16	Outline
Woodland and forest	Other woodland; broadleaved	8.29	Moderate	Retained	76.27	Outline
Woodland and forest	Other woodland; broadleaved	0.631	Good	Retained	8.71	Outline
Individual trees	Rural tree	1.71	Moderate	Retained	15.73	Outline
Individual trees	Rural tree	0.11	Moderate	Retained	Irreplaceable habitat - no units generated	Outline
Watercourse footprint	Watercourse footprint	0.01	N/A - Other	Retained	0.00	Outline
Woodland and forest	Lowland mixed deciduous woodland	0.005	Moderate	Retained	Irreplaceable habitat - no units generated	Outline
Woodland and forest	Other woodland; broadleaved	0.120089	Good	Retained	1.66	Detailed

Broad Habitat	Proposed Habitat Type	Area (hectares)	Condition	Habitat Intervention	Total Biodiversity Units Delivered	Detailed / Outlined Component
Sparsely vegetated land	Tall forbs	0.004432	Poor	Retained	0.01	Detailed
Urban	Artificial unvegetated, unsealed surface	0.03711	N/A - Other	Retained	0.00	Detailed
Woodland and forest	Lowland mixed deciduous woodland	0.1312	Good	Retained	2.72	Detailed
Woodland and forest	Other woodland; broadleaved	0.201205	Moderate	Retained	1.85	Detailed
Grassland	Other neutral grassland	0.024994	Poor	Retained	0.11	Detailed
Sparsely vegetated land	Tall forbs	0.007953	Good	Retained	0.05	Detailed
Cropland	Cereal crops	0.0783	Condition Assessment N/A	Retained	0.18	Detailed
Urban	Developed land; sealed surface	0.041842	N/A - Other	Retained	0.00	Detailed
Grassland	Other neutral grassland	0.262115	Moderate	Retained	2.41	Detailed

Broad Habitat	Proposed Habitat Type	Area (hectares)	Condition	Habitat Intervention	Total Biodiversity Units Delivered	Detailed / Outlined Component
Woodland and forest	Other woodland; broadleaved	0.018734	Moderate	Retained	0.16	Detailed
Woodland and forest	Lowland mixed deciduous woodland	0.000131	Moderate	Retained	0.00	Detailed
Woodland and forest	Other woodland; broadleaved	0.279361	Good	Retained	3.69	Detailed
Cropland	Cereal crops	0.005515	Condition Assessment N/A	Retained	0.01	Detailed
Woodland and forest	Lowland mixed deciduous woodland	0.00013	Good	Retained	0.00	Detailed
Urban	Artificial unvegetated, unsealed surface	0.017155	N/A - Other	Retained	0.00	Detailed
Grassland	Other neutral grassland	0.304998	Moderate	Retained	2.68	Detailed
Urban	Developed land; sealed surface	0.217629	N/A - Other	Retained	0.00	Detailed
Sparsely vegetated land	Tall forbs	0.027519	Moderate	Retained	0.12	Detailed

Broad Habitat	Proposed Habitat Type	Area (hectares)	Condition	Habitat Intervention	Total Biodiversity Units Delivered	Detailed / Outlined Component
Individual trees	Rural tree	0.0366	Moderate	Retained	0.34	Detailed
Individual trees	Rural tree	0.1221	Moderate	Retained	1.07	Detailed
Woodland and forest	Lowland Mixed Deciduous woodland	0.005	Good	Retained	Irreplaceable habitat - no units generated	Outline
Grassland	Other neutral grassland – Lowland Meadows	2.079	Moderate - Good	Enhanced	33.11	Outline
Grassland	Modified grassland – Lowland Meadows	4.895	Moderate - Good	Enhanced	56.54	Outline
Grassland	Modified grassland – Lowland Meadows	21.718	Moderate - Good	Enhanced	270.25	Outline
Lakes	Ponds (priority habitat)	0.17	Moderate - Good	Enhanced	2.14	Outline
Woodland and forest	Other woodland; broadleaved	0.166	Poor	Enhanced	1.21	Outline
Woodland and forest	Lowland mixed deciduous woodland	1.24	Moderate - Good	Enhanced	18.40	Outline

Broad Habitat	Proposed Habitat Type	Area (hectares)	Condition	Habitat Intervention	Total Biodiversity Units Delivered	Detailed / Outlined Component
Grassland	Modified grassland	0.849136	Poor	Enhanced	5.77	Detailed
Grassland	Modified grassland	0.92209	Moderate	Enhanced	7.01	Detailed
Heathland and shrub	Mixed scrub	0.000354	Poor	Enhanced	0.00	Detailed
Heathland and shrub	Mixed scrub	0.000695	Poor	Enhanced	0.01	Detailed
Grassland	Modified grassland	0.755853	Moderate	Enhanced	5.49	Detailed
Grassland	Modified grassland	0.520378	Poor	Enhanced	3.38	Detailed
Grassland	Modified grassland	0.84	Poor	Created	1.74	Outline
Grassland	Other neutral grassland	0.59	Moderate	Created	4.23	Outline
Urban	Developed land; sealed surface	0.51	N/A - Other	Created	0.00	Outline

Broad Habitat	Proposed Habitat Type	Area (hectares)	Condition	Habitat Intervention	Total Biodiversity Units Delivered	Detailed / Outlined Component
Grassland	Modified grassland	0.89	Poor	Created	1.84	Outline
Grassland	Other neutral grassland	2.36	Moderate	Created	16.92	Outline
Urban	Developed land; sealed surface	0.89	N/A - Other	Created	0.00	Outline
Grassland	Modified grassland	0.69	Poor	Created	1.43	Outline
Grassland	Other neutral grassland	0.69	Moderate	Created	4.95	Outline
Urban	Developed land; sealed surface	0.1	N/A - Other	Created	0.00	Outline
Grassland	Modified grassland	2.09	Moderate	Created	7.76	Outline
Urban	Developed land; sealed surface	1.08	N/A - Other	Created	0.00	Outline
Urban	Introduced shrub	0.42	Condition Assessment N/A	Created	0.87	Outline

Broad Habitat	Proposed Habitat Type	Area (hectares)	Condition	Habitat Intervention	Total Biodiversity Units Delivered	Detailed / Outlined Component
Heathland and shrub	Mixed scrub	0.42	Moderate	Created	3.01	Outline
Grassland	Other neutral grassland	2.8	Good	Created	25.20	Outline
Heathland and shrub	Mixed scrub	1.75	Good	Created	15.75	Outline
Urban	Developed land; sealed surface	27.78	N/A - Other	Created	0.00	Outline
Urban	Vegetated garden	11.87	Condition Assessment N/A	Created	24.53	Outline
Heathland and shrub	Mixed scrub	0.74	Good	Created	6.66	Outline
Lakes	Ponds (priority habitat)	0.41	Good	Created	4.43	Outline
Urban	Developed land; sealed surface	0.22	N/A - Other	Created	0.00	Outline
Urban	Allotments	1.39	Moderate	Created	5.75	Outline

Broad Habitat	Proposed Habitat Type	Area (hectares)	Condition	Habitat Intervention	Total Biodiversity Units Delivered	Detailed / Outlined Component
Grassland	Modified grassland	6.99	Poor	Created	14.45	Outline
Urban	Artificial unvegetated, unsealed surface	2.85	N/A - Other	Created	0.00	Outline
Urban	Developed land; sealed surface	0.54	N/A - Other	Created	0.00	Outline
Grassland	Other neutral grassland	0.1	Moderate	Created	0.72	Outline
Urban	Sustainable drainage system	0.1	Moderate	Created	0.26	Outline
Urban	Developed land; sealed surface	3.37	N/A - Other	Created	0.00	Outline
Grassland	Other neutral grassland	0.62	Moderate	Created	4.44	Outline
Urban	Sustainable drainage system	0.62	Moderate	Created	1.60	Outline
Urban	Developed land; sealed surface	3.41	N/A - Other	Created	0.00	Outline

Broad Habitat	Proposed Habitat Type	Area (hectares)	Condition	Habitat Intervention	Total Biodiversity Units Delivered	Detailed / Outlined Component
Grassland	Other neutral grassland	0.8	Moderate	Created	5.74	Outline
Urban	Sustainable drainage system	0.8	Moderate	Created	2.06	Outline
Lakes	Ponds (priority habitat)	0.25	Moderate	Created	1.93	Outline
Urban	Developed land; sealed surface	0.03	N/A - Other	Created	0.00	Outline
Urban	Developed land; sealed surface	5.03	N/A - Other	Created	0.00	Outline
Individual trees	Urban tree	3.44	Moderate	Created	11.26	Outline
Grassland	Lowland meadows	1.33	Good	Created	6.61	Outline
Woodland and forest	Lowland mixed deciduous woodland	2.45	Poor	Created	3.64	Outline
Urban	Developed land; sealed surface	0.07	N/A - Other	Created	0.00	Outline

Broad Habitat	Proposed Habitat Type	Area (hectares)	Condition	Habitat Intervention	Total Biodiversity Units Delivered	Detailed / Outlined Component
Urban	Developed land; sealed surface	0.85	N/A - Other	Created	0.00	Outline
Urban	Vegetated garden	0.37	Condition Assessment N/A	Created	0.66	Outline
Individual trees	Rural tree	0.8387	Moderate	Created	2.63	Detailed
Urban	Developed land; sealed surface	5.119735	N/A - Other	Created	0.00	Detailed
Grassland	Other neutral grassland	4.1131	Moderate	Created	29.49	Detailed
Grassland	Other neutral grassland	3.2345	Moderate	Created	23.19	Detailed
Heathland and shrub	Hawthorn scrub	0.0898	Moderate	Created	0.64	Detailed
Grassland	Other neutral grassland	0.2025	Moderate	Created	1.45	Detailed
Urban	Rain garden	0.1004	Moderate	Created	0.39	Detailed

Broad Habitat	Proposed Habitat Type	Area (hectares)	Condition	Habitat Intervention	Total Biodiversity Units Delivered	Detailed / Outlined Component
Grassland	Other neutral grassland	0.8948	Moderate	Created	6.42	Detailed
Urban	Rain garden	0.1006	Moderate	Created	0.39	Detailed
Watercourse footprint	Watercourse footprint	0.0449	N/A - Other	Created	0.00	Detailed
Woodland and forest	Other woodland; broadleaved	0.2826	Moderate	Created	1.42	Detailed
Urban	Developed land; sealed surface	3.876	N/A - Other	Created	0.00	Detailed
Grassland	Other neutral grassland	4.191	Moderate	Created	28.74	Detailed
Grassland	Other neutral grassland	0.8318	Moderate	Created	5.70	Detailed
Heathland and shrub	Hawthorn scrub	0.1156	Moderate	Created	0.79	Detailed
Grassland	Other neutral grassland	0.1582	Moderate	Created	1.08	Detailed

Broad Habitat	Proposed Habitat Type	Area (hectares)	Condition	Habitat Intervention	Total Biodiversity Units Delivered	Detailed / Outlined Component
Urban	Rain garden	0.0065	Moderate	Created	0.02	Detailed
Grassland	Other neutral grassland	0.527	Moderate	Created	3.61	Detailed
Urban	Rain garden	0.0227	Moderate	Created	0.08	Detailed
Watercourse footprint	Watercourse footprint	0.0008	N/A - Other	Created	0.00	Detailed
Woodland and forest	Other woodland; broadleaved	0.4478	Moderate	Created	2.15	Detailed
Woodland and forest	Lowland mixed deciduous woodland	0.158	Poor	Created	0.23	Detailed

Table 4.2: Post-development Habitats, Habitat Action and Units Delivered – Hedgerows

Hedgerow Number	Proposed Hedgerow Type	Length (km)	Condition	Habitat Intervention	Total Hedgerow Units Delivered	Outline / Detailed Component
T26	Species-rich native hedgerow with trees	0.11	Good	Retained	2.28	Outline
T53	Line of trees	0.08	Moderate	Retained	0.37	Outline
T58	Ecologically valuable line of trees	0.02	Moderate	Retained	0.18	Outline
T78	Ecologically valuable line of trees	0.16	Moderate	Retained	1.41	Outline
T80	Line of trees	0.03	Moderate	Retained	0.13	Outline
T83	Ecologically valuable line of trees	0.15	Poor	Retained	0.66	Outline
T106	Ecologically valuable line of trees	0.04	Moderate	Retained	0.37	Outline
T110	Line of trees	0.05	Poor	Retained	0.46	Outline

Hedgerow Number	Proposed Hedgerow Type	Length (km)	Condition	Habitat Intervention	Total Hedgerow Units Delivered	Outline / Detailed Component
T147	Ecologically valuable line of trees	0.17	Poor	Retained	0.75	Outline
T247	Ecologically valuable line of trees	0.1	Poor	Retained	0.44	Outline
T247	Ecologically valuable line of trees	0.08	Poor	Retained	0.35	Outline
T255	Ecologically valuable line of trees	0.02	Poor	Retained	0.09	Outline
T162	Species-rich native hedgerow with trees	0.14	Good	Retained	2.77	Outline
T162	Species-rich native hedgerow with trees	0.06	Good	Retained	1.19	Outline
T182	Species-rich native hedgerow with trees	0.12	Moderate	Retained	1.66	Outline
T207	Ecologically valuable line of trees	0.03	Moderate	Retained	0.28	Outline
T244	Species-rich native hedgerow with trees	0.06	Good	Retained	1.19	Outline

Hedgerow Number	Proposed Hedgerow Type	Length (km)	Condition	Habitat Intervention	Total Hedgerow Units Delivered	Outline / Detailed Component
-	Line of Trees	0.08	Moderate	Retained	0.32	Outline
T19	Species-rich native hedgerow with trees	0.132	Good	Retained	2.61	Detailed
T21	Species-rich native hedgerow with trees	0.008088	Good	Retained	0.16	Detailed
T25	Species-rich native hedgerow with trees	0.0070073	Good	Retained	0.15	Detailed
T26	Species-rich native hedgerow with trees	0.0861886	Good	Retained	1.78	Detailed
T59	Species-rich native hedgerow with trees	0.2182499	Good	Retained	4.32	Detailed
T131	Species-rich native hedgerow with trees	0.0372938	Moderate	Retained	0.49	Detailed
T146	Species-rich native hedgerow with trees	0.1531089	Good	Retained	3.03	Detailed
T161	Species-rich native hedgerow with trees	0.0810047	Poor	Retained	0.53	Detailed

Hedgerow Number	Proposed Hedgerow Type	Length (km)	Condition	Habitat Intervention	Total Hedgerow Units Delivered	Outline / Detailed Component
T162	Species-rich native hedgerow with trees	0.0017183	Good	Retained	0.03	Detailed
T223	Line of trees	0.1161588	Moderate	Retained	0.51	Detailed
	Native hedgerow with trees - Species-rich native hedgerow with trees	0.18	Good	Enhanced	3.52	Outline
	Native hedgerow - Species-rich native hedgerow	0.43	Good	Enhanced	5.21	Outline
	Native hedgerow with trees - Species-rich native hedgerow with trees	0.11	Good	Enhanced	2.07	Outline
	Native hedgerow with trees - Species-rich native hedgerow with trees	0.08	Good	Enhanced	1.51	Outline
	Native hedgerow - Species-rich native hedgerow	0.05	Good	Enhanced	0.63	Outline
	Native hedgerow with trees - Species-rich native hedgerow with trees	0.1	Good	Enhanced	1.96	Outline

Hedgerow Number	Proposed Hedgerow Type	Length (km)	Condition	Habitat Intervention	Total Hedgerow Units Delivered	Outline / Detailed Component
	Native hedgerow - Species-rich native hedgerow	0.03	Good	Enhanced	0.35	Outline
	Native hedgerow - Species-rich native hedgerow	0.06	Good	Enhanced	0.76	Outline
	Native hedgerow with trees - Species-rich native hedgerow with trees	0.05	Good	Enhanced	0.94	Outline
	Native hedgerow - Species-rich native hedgerow	0.15	Good	Enhanced	1.84	Outline
	Native hedgerow with trees - Species-rich native hedgerow with trees	0.13	Good	Enhanced	2.45	Outline
	Native hedgerow - Species-rich native hedgerow	0.08	Good	Enhanced	0.90	Outline
	Native hedgerow - Species-rich native hedgerow	0.04	Moderate	Enhanced	0.29	Outline
	Native hedgerow - Species-rich native hedgerow	0.15	Good	Enhanced	1.76	Outline

Hedgerow Number	Proposed Hedgerow Type	Length (km)	Condition	Habitat Intervention	Total Hedgerow Units Delivered	Outline / Detailed Component
	Native hedgerow - Species-rich native hedgerow	0.07	Moderate	Enhanced	0.51	Outline
	Native hedgerow - Species-rich native hedgerow	0.05	Good	Enhanced	0.61	Outline
	Native hedgerow - Species-rich native hedgerow	0.17	Good	Enhanced	1.91	Outline
	Native hedgerow - Species-rich native hedgerow	0.01	Moderate	Enhanced	0.08	Outline
	Native hedgerow - Species-rich native hedgerow	0.06	Moderate	Enhanced	0.46	Outline
	Native hedgerow with trees - Species-rich native hedgerow with trees	0.13	Good	Enhanced	2.38	Outline
	Species-rich native hedgerow	0.03396	Moderate	Created	0.23	Detailed
	Species-rich native hedgerow	1.2	Moderate	Created (to reach 10%)	1.2	Outline (TBC)

Table 4.3: Post-development Habitats, Habitat Action and Units Delivered – Watercourses

Proposed Watercourse Type	Length (km)	Condition	Watercourse Encroachment	Riparian Zone Encroachment	Habitat Intervention	Total Watercourse Units Delivered	Outline / Detailed Component
Other rivers and streams	0.48	Fairly Good	No Encroachment	Moderate/ Minor	Retained	7.45	Outline
Other rivers and streams	0.05	Fairly Good	No Encroachment	Minor/ Minor	Retained	0.82	Outline
Ditches	0.08	Moderate	No Encroachment	Major/Minor	Retained	0.59	Outline
Ditches	0.005	Poor	No Encroachment	Major/Major	Retained	0.02	Detailed
Ditches	0.0453	Poor	No Encroachment	Minor/ Minor	Retained	0.19	Detailed
Other rivers and streams	0.054	Fairly Good	Minor	Moderate/ Minor	Retained	0.67	Detailed
Ditches	0.00444424	Moderate	No Encroachment	No Encroachment/ No Encroachment	Retained	0.04	Detailed
Ditches	0.01621599	Moderate	No Encroachment	Minor/ No Encroachment	Retained	0.15	Detailed
Other rivers and streams	1.48	Fairly Good - Fairly Good	Minor	Minor/ Minor	Enhanced	19.40	Outline

Proposed Watercourse Type	Length (km)	Condition	Watercourse Encroachment	Riparian Zone Encroachment	Habitat Intervention	Total Watercourse Units Delivered	Outline / Detailed Component
Other rivers and streams	2.06	Fairly Good - Fairly Good	Minor	Minor/ Minor	Enhanced	27.01	Outline
Ditches	0.12	Poor - Moderate	No Encroachment	No Encroachment/ No Encroachment	Enhanced	0.95	Outline
Ditches	0.22	Poor - Moderate	No Encroachment	No Encroachment/ No Encroachment	Enhanced	1.75	Outline
Ditches	0.23	Poor - Moderate	No Encroachment	No Encroachment/ No Encroachment	Enhanced	1.91	Outline
Ditches	0.15	Poor - Moderate	No Encroachment	No Encroachment/ No Encroachment	Enhanced	1.25	Outline
Ditches	0.02	Poor - Moderate	No Encroachment	Moderate/ Moderate	Enhanced	0.14	Outline
Ditches	0.1	Poor - Moderate	No Encroachment	No Encroachment/ No Encroachment	Enhanced	0.83	Outline
Ditches	0.38	Poor - Moderate	No Encroachment	No Encroachment/ No Encroachment	Enhanced	3.16	Outline
Ditches	0.03	Poor - Moderate	No Encroachment	Major/Major	Enhanced	0.19	Outline

Proposed Watercourse Type	Length (km)	Condition	Watercourse Encroachment	Riparian Zone Encroachment	Habitat Intervention	Total Watercourse Units Delivered	Outline / Detailed Component
Ditches	0.1	Poor - Moderate	No Encroachment	No Encroachment/ No Encroachment	Enhanced	0.83	Outline
Ditches	0.01	Poor - Moderate	No Encroachment	No Encroachment/ No Encroachment	Enhanced	0.08	Outline
Ditches	0.14	Poor - Moderate	No Encroachment	Major/Moderate	Enhanced	0.89	Outline
Ditches	0.17	Poor - Moderate	No Encroachment	No Encroachment/ No Encroachment	Enhanced	1.41	Outline
Ditches	0.08	Poor - Moderate	No Encroachment	Major/No Encroachment	Enhanced	0.58	Outline
Ditches	0.07	Poor - Moderate	No Encroachment	No Encroachment/ No Encroachment	Enhanced	0.56	Outline
Ditches	0.02125	Poor - Moderate	No Encroachment	No Encroachment/ No Encroachment	Enhanced	0.05	Detailed
Ditches	0.24156	Poor - Moderate	No Encroachment	Minor/ No Encroachment	Enhanced	1.51	Detailed
Ditches	0.09555	Poor - Moderate	No Encroachment	Major/Major	Enhanced	0.57	Detailed

Proposed Watercourse Type	Length (km)	Condition	Watercourse Encroachment	Riparian Zone Encroachment	Habitat Intervention	Total Watercourse Units Delivered	Outline / Detailed Component
Ditches	0.10037	Poor - Moderate	No Encroachment	Minor/ No Encroachment	Enhanced	0.81	Detailed
Ditches	0.22232	Poor - Moderate	No Encroachment	Major/Major	Enhanced	1.03	Detailed
Ditches	0.1	Moderate	No Encroachment	Major/Moderate	Created	0.38	Outline
Ditches	0.18	Moderate	No Encroachment	Major/Major	Created	0.65	Outline
Ditches	0.59	Moderate	Minor	Major/Major	Created	1.70	Outline
Ditches	0.06	Moderate	No Encroachment	Major/Major	Created	0.22	Outline
Ditches	0.05	Moderate	No Encroachment	Major/Major	Created	0.18	Outline
Ditches	0.03	Moderate	No Encroachment	Moderate/ Moderate	Created	0.12	Outline
Ditches	0.13	Moderate	No Encroachment	Minor/ Minor	Created	0.57	Outline

Proposed Watercourse Type	Length (km)	Condition	Watercourse Encroachment	Riparian Zone Encroachment	Habitat Intervention	Total Watercourse Units Delivered	Outline / Detailed Component
Ditches	0.32	Moderate	No Encroachment	Major/Minor	Created	1.24	Outline
Ditches	0.04	Moderate	No Encroachment	Major/Major	Created	0.14	Outline
Ditches	0.081265	Moderate	No Encroachment	Minor/ Minor	Created	0.37	Detailed
Ditches	0.038081	Moderate	No Encroachment	Minor/ Minor	Created	0.17	Detailed
Culvert	0.036675	Poor	N/A - Culvert	N/A - Culvert	Created	0.03	Detailed
Ditches	2.2	Moderate	No Encroachment	Moderate/ Moderate	Created	8.59	Detailed

APPENDIX 5
BIODIVERSITY NET GAIN PRINCIPLES

Biodiversity Net Gain Principles

The ten good practice principles[1] must be met for a proposed development to achieve qualitative BNG and overall BNG. The Proposed Development has been assessed against each good practice principle and the result is displayed with supporting evidence in the table below. Where a principle has not been met, recommendations on how the principle could be met in future are also provided. It should be noted that the adherence to these principles is based on the Proposed Development's current stage in the BNG process and therefore the results presented below do not necessarily rule out future adherence.

[1] CIRIA, CIEEM, IEMA (2019). Biodiversity Net Gain: Good Practice Principles for Development. A Practical Guide.

Principle	Principle Description	Evidence	Current Outcome	Recommendations
1. Apply the mitigation hierarchy	Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision-makers where possible, compensate for losses that cannot be avoided. If compensating for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.	Embedded mitigation for the Proposed Development has included avoidance of priority habitats and protected plants (i.e. native bluebell) where possible, creation of buffers around sensitive on-Site and adjacent habitats (including watercourses and woodland). The loss of all on- and off-Site (adjacent) AWI woodland will be avoided through design and micro-siting. However, it has not been possible to avoid all areas of priority habitat, including a number of ponds within the Ifield Golf Course and hedgerows, but these will be compensated for with new habitat planting. The Proposed Development will retain three veteran trees located within the Outline Component, however there is unavoidable loss of one veteran tree within the Detailed Component. As veteran trees are regarded as irreplaceable habitats, bespoke compensation measures will be applied to support the retention of ecological function and habitat continuity.	Achieved	BNG requirements for linear habitats can be achieved with 1.2 km additional hedgerow planting (native species rich) in moderate condition as well as at least 2.2 km of new ditch creation in moderate condition. Bespoke compensation measures to address the loss of one veteran tree (irreplaceable habitat), should be applied to support the retention of ecological function and habitat continuity.

Principle	Principle Description	Evidence	Current Outcome	Recommendations
2. Avoid losing biodiversity that cannot be offset elsewhere	Avoid impacts on irreplaceable biodiversity – these impacts cannot be offset to achieve No Net Loss or Net Gain.	The loss of all on- and off-Site (adjacent) AWI woodland will be avoided through design and micro-siting. Three veteran trees located within the Outline Component will be retained, and bespoke compensation measures will be applied to address the unavoidable loss of one veteran tree within the Detailed Component.	Achieved but bespoke compensation required for the loss of a veteran tree.	Bespoke compensation measures to address the loss of one veteran tree (irreplaceable habitat), should be applied to support the retention of ecological function and habitat continuity.
3. Be inclusive and equitable	Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to Net Gain. Achieve Net Gain in partnership with stakeholders where possible and share the benefits fairly among stakeholders.	Consultation will be undertaken with the local authority and nature bodies in relation to the creation/enhancement and management of new habitats, in particular lowland meadows and lowland mixed deciduous woodland.	Achieved	Recommend how the Proposed Development can be inclusive.
4. Address risks	Mitigate difficulty, uncertainty and other risks to achieving Net Gain. Apply well-accepted ways to add contingency when calculating biodiversity losses and gains to account for any remaining risks, as well as to compensate for the time between the losses occurring and the gains being fully realised.	The Statutory Biodiversity Metric risk multipliers to account for the time required for habitats to reach any given condition, and the difficulty to create any given habitat. A variety of locally relevant habitats have been incorporated into the landscape design, including woodland, ponds, lowland meadow, hedgerow and neutral grassland that will also increase habitat connectivity. A two-year delay has been applied; for habitat creation of all new habitats, and for habitat enhancement of grassland to lowland meadows, and lowland	Achieved	The feasibility of enhancing grassland to lowland meadow should be undertaken early in the detailed design stage. An initial soil analysis should be undertaken to inform the compilation of habitat management and monitoring plan detailing the measures and requirement to create

Principle	Principle Description	Evidence	Current Outcome	Recommendations
		mixed deciduous woodland from moderate to good condition.		habitats and achieve target condition. A long-term woodland management approach should be applied for the creation and enhancement of lowland mixed deciduous woodland. The location of new woodland and management actions should aim to promote woodland establishment, connectivity with adjacent off-Site woodland, and improve condition of existing woodland on-Site as informed by the HCA results.
5. Make a measurable Net Gain contribution	Achieve a measurable, overall gain for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities.	A measurable net gain has been achieved for area-based habitats. The final change is a 12.70% net gain for area-based habitats, a -3.42 % net loss for hedgerows and -0.46% net loss for watercourses. Net gains for linear habitats could be achieved through habitat creation.	Achieved for area-based habitats, with potential to achieve for linear habitats (see recommendations).	Achieved with 1.2 km additional hedgerow planting (native species rich) in moderate condition as well as at least 2.2 km of new ditch creation in moderate condition.
6. Achieve the best outcomes for biodiversity	Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make	This BNG assessment followed a rigorous QA process. The Proposed Development achieved a Net Gain for area habitats with losses compensated for on-Site, with 'like-for-like or better' habitats, to ensure trading rules have	Achieved	-

Principle	Principle Description	Evidence	Current Outcome	Recommendations
	clearly justified choices when: • Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses; • Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation; • Achieving Net Gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels; • Enhancing existing or creating new habitat; • Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity.	been satisfied. The best habitats for the specific Site have been chosen for mitigation works including lowland meadow, lowland mixed deciduous woodland and a relocated pond created to compensate for losses of ponds. Habitat and green infrastructure have been designed in a way that is supportive to existing local habitat networks. The incorporation of 'Semi Natural Open Spaces / Green Space', 'Landscape Managed for Nature Conservation' and the 'Ifield Meadow Buffer', retention of existing tree groups and woodland, and creation of new habitats using native planting within the landscape masterplans, demonstrates prioritisation of natural biodiversity within the development design.		

Principle	Principle Description	Evidence	Current Outcome	Recommendations
7. Be additional	Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway)	The nature conservation outcomes relating to legislation and policy have been met. The aim is to enhance extensive areas of low value grassland to very high distinctiveness lowland meadow habitat. This will help contribute towards the restoration of this habitat type which has declined significantly in West Sussex and will deliver significant benefits in terms of biodiversity. The enhancement and creation of lowland mixed deciduous woodland, a Habitat of Principle Importance, will help increase this habitat area coverage and connectivity with surrounding woodland areas.	Achieved	-
8. Create a Net Gain legacy	Ensure Net Gain generates long-term benefits by: • Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity; • Planning for adaptive management and securing dedicated funding for long-term management; • Designing Net Gain for biodiversity to be resilient to external	New habitats have been chosen based on expert opinion and will be designed and implemented through liaison with stakeholders and production of a HMMP. In addition, climate resilient native species are recommended as are changes to land management to protect habitats and reduce agricultural pressure etc. as part of enhancements. It ensures the ecosystem services of the area are retained and will retain and enhance freshwater features, grassland and deciduous woodland. The development conforms with requirements for protected species or other environmental mitigation, as well as BNG policies in the relevant local plans (Strategic Policy 17 of the Horsham District	Achieved	-

Principle	Principle Description	Evidence	Current Outcome	Recommendations
	factors, especially climate change; • Mitigating risks from other land uses; • Avoiding displacing harmful activities from one location to another; • Supporting local-level management of Net Gain activities.	Local Plan 2023-2040 – Regulation 19 and Policy GI3 Crawley Borough Local Plan 2023 – 2040. It has been demonstrated that the proposals maintain and enhance the network of green infrastructure, natural capital and biodiversity.		
9. Optimise sustainability	Prioritise Biodiversity Net Gain and, where possible, optimise the wider benefits for a sustainable society and economy.	The current landscape plan takes into account BNG requirements for the Site but also wider sustainability requirements and ambitions such as expansion of local green infrastructure networks, addressing both where possible, to provide better outcomes for biodiversity.	Achieved	-
10. Be transparent	Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.	Data was consistently shared across disciplines and stakeholders to allow biodiversity to be designed into the development to maximise outcomes via regular meetings and via collaborative drawings.	Achieved	-

APPENDIX 6
HABITAT CONDITION ASSESSMENT

Habitat Reference	UK Hab code (secondary code)	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5	Criterion 6	Criterion 7	Criterion 8	Criterion 9	Criterion 10	Criterion 11	Criterion 12	Criterion 13	Condition Score	Notes / Habitat description
T1	g3c	Y	Y	N	N	N	N								Poor	Field margin, fairly sp. poor but tall sward
T2	h2a	Y	Y	Y	Y	Y	Y	Y	Y						Good	**Native sp. rich**
T3	c1														n/a	
T4	g3c	Y	Y	N	N	N	N								Poor	Field margin, fairly sp. poor but tall sward
T5	h3a	N	Y	Y	N	N									Poor	Contains 3x mature oaks. Prev. classified as sp. Rich hedge w/ trees - but now classified as scrub (lapsed hedge).
T6	c1														n/a	
T7	g3c	Y	Y	N	Y	N	N								Moderate	Field margin, fairly sp. poor but tall sward
T8	r (191)	Y	N	Y	Y	N	N	N	Y						Poor	Dry ditch (but unseasonably dry weather) - ditch HCA undertaken. Precautionary pass of Criteria A + C.
T9	h3h	Y	Y	N	Y	N									Moderate	Mosaic of scrub, trees, TRV and bracken. Dry ditch (T8) running through centre.
T10	c1														n/a	
T11	g3c	Y	Y	N	Y	N	N								Moderate	Field margin, fairly sp. poor but tall sward
T12	h2a	Y	Y	Y	Y	Y	Y	Y	Y	N	Y				Good	**Native sp. Poor w/ trees**
T13	Individual trees														Moderate	2x mature, 4x young
T14	Individual trees														Moderate	1x semi mature
T15	g4	Y	N	Y	N	Y	Y	Y							Moderate	Some evidence of grazing. Large patches dominated by thistles and dock. Update visit on 17-02-2023
T16	Individual trees														Moderate	4x early mature
T17	w1g (37)	3	3	3	3	3	3	3	2	1	3	2	1	3	Good (33)	
T18																River Mole (see previous Phase 1 map for location) - we are not including this in our assessment so no need to add at this stage
T19	h2a	Y	Y	Y	Y	N	Y	Y	Y						Good	**Native sp. Poor**
T20	Individual trees														Moderate	1x mature
T21	h2a	Y	Y	Y	Y	N	Y	Y	Y						Good	**Native sp. Poor**

T22	h2a	N	N	Y	N	N	Y	N	Y	Y	Y				Poor	**Native sp. Poor w/ trees**
T23	g4	Y	N	Y	N	Y	Y	Y							Moderate	Update visit on 17-02-2023
T24	w1f (37)	3	3	3	3	3	3	3	3	3	3	1	3	2	Good (36)	Ancient woodland indicators (including bluebell)
T25	h2a	Y	Y	Y	Y	Y	Y	Y	Y						Good	**Native sp. Poor.** Along woodland edge, but defined.
T26	h2a	Y	Y	Y	N	N	Y	Y	Y	Y	Y				Good	**Native sp. Rich w/ trees.**
T27	w1f (37)	3	3	3	3	3	3	3	3	3	3	2	2	3	Good (37)	Veteran trees, diverse species mix, well-developed canopy layers.
T29	Individual trees														Moderate	1x semi-mature
T30	c1														n/a	
T31	w1g (37)	3	3	3	3	3	1	2	3	2	2	2	1	2	Moderate (30)	Same as T70/ T39
T32	u1b														n/a	Farm tracks
T33	h2a	Y	Y	Y	N	Y	Y	Y	N						Good	**Native sp. poor**
T34	h2a	Y	Y	Y	N	Y	Y	Y	Y	N	Y				Good	**Native sp. poor hedge w/ trees associated w/ ditch**
T35	g3c	Y	Y	Y	N	Y	N								Moderate	
T36	c1														n/a	
T37	s (17)	Y	Y	Y											Good	Tall ruderal vegetation - no INNS. Nice structure and intermixed with grasses.
T38	g3c	Y	Y	Y	N	Y	N								Moderate	Marshy grassland
T39	w1g (37)	3	3	3	3	3	1	2	3	2	2	2	1	2	Moderate (30)	Same as T70/ T31
T40	g4	Y	Y	N	N	N	N	Y							Poor	Sp. poor, encroached by scrub and bracken, damaged by path
T41	h2a	Y	Y	N	N	Y	Y	Y	Y	N	Y				Moderate	**Native sp. poor w/ trees associated w/ ditch.**
T42	h2a	Y	Y	N	N	N	Y	Y	Y	N	Y				Moderate	**Native sp. poor w/ trees associated w/ ditch.**
T43	g3c	Y	Y	Y	N	Y	N								Moderate	Field edge
T44	r (191)	Y	N	Y	Y	Y	N	N	Y						Poor	Dry ditch (but unseasonably dry weather) - ditch HCA undertaken. Precautionary pass of Criteria A + C.
T45	h3h	Y	N	Y	Y	N									Moderate	Mixed scrub as too short to be classed as hedges
T46	h2a	Y	Y	Y	Y	Y	Y	Y	Y						Good	**Native sp. poor.** Verging on treeline given maturity.
T47	s (17)	N	Y	Y											Moderate	Tall ruderal vegetation - no INNS
T48	g3c	Y	Y	Y	Y	Y	Y								Good	Nice diversity and structure, minimal disturbance but scrub encroachment may become an issue over time

T49	h3h	N	N	N	Y	N									Poor	Scattered scrub
T50	g3c	Y	Y	Y	N	Y	N								Moderate	
T51	r (191)	Y	N	Y	Y	Y	N	N	Y						Poor	Dry ditch (but unseasonably dry weather) - ditch HCA undertaken. Precautionary pass of Criteria A + C.
T52	w1g (37)	2	3	3	3	3	3	2	3	1	2	1	1	2	Moderate (29)	
T53	w1g6	N	Y	Y	N	Y									Moderate	**NOT ecologically valuable.** Line of predominantly hybrid black poplars
T54	h2a	Y	Y	N	N	N	Y	Y	Y	N	Y				Moderate	**Native sp. poor hedge w/ trees associated w/ ditch**
T55	c1														n/a	
T56	r (191)	Y	N	Y	Y	Y	N	N	Y						Poor	Dry ditch (but unseasonably dry weather) - ditch HCA undertaken. Precautionary pass of Criteria A + C.
T57	g4	N	Y	Y	N	Y	Y	Y							Poor	Sp. poor, damaged, but no scrub encroachment
T58	w1g6	Y	Y	Y	N	Y									Moderate	**Ecologically valuable line of trees associated w/ ditch.** Predominantly oaks.
T59	h2a	Y	Y	Y	Y	Y	Y	Y	Y	N	Y				Good	**Native sp. poor hedge w/ trees**
T60	u1b5														n/a	Farm buildings/ house
T61	s (17)	N	N	Y											Poor	Tall ruderal vegetation - poor diversity, all same height
T62	u1 (231)														n/a	Amenity grassland/ vegetated garden.
T63	u1b														n/a	Hardstanding yard/ driveway etc
T64	w1g (37)	1	3	3	3	3	1	1	3	1	1	2	1	1	Poor (24)	Surrounding garden, lots of disturbance/ damage
T65	s (17)	N	N	Y											Poor	Tall ruderal vegetation - poor diversity and structure
T66	h3h	Y	Y	N	N	N									Poor	Dense scrub, attached to woodland but not yet woodland
T67	h2a	Y	Y	Y	N	Y	Y	Y	Y	Y	Y				Good	**Native sp. poor hedge w/ trees.** Very mature.
T68	g3c	Y	Y	N	Y	N	N								Moderate	Relatively sp. poor
T69	w1g (37)	2	3	3	3	3	2	2	3	2	2	1	1	2	Moderate (29)	Narrow belt of woodland surrounding River Mole, with some open/scrubby areas
T70	w1g (37)	3	3	3	3	3	1	2	3	2	2	2	1	2	Moderate (30)	Same as T31/ T39
T71	g3c	Y	Y	Y	N	Y	N								Moderate	
T72	s (17)	Y	Y	Y											Good	Tall ruderal vegetation along woodland edge, with grasses also present.
T73	g3c	Y	Y	N	Y	Y	N								Moderate	Marshy area of grassland containing soft rush
T74	Individual trees														Moderate	2x mature + 1x young

T75	g4	Y	N	Y	N	Y	Y	Y							Moderate	Update visit on 17-02-2023
T76	Individual trees														Moderate	1x mature + 1x monolith
T77	g3c	Y	N	N	Y	Y	N								Moderate	Marshy grassland dominated by soft rush - previously a pond
T78	w1g6	Y	N	Y	N	Y									Moderate	**Ecologically valuable line of trees**
T79	g4	N	Y	Y	Y	Y	Y	Y							Poor	Very sp. poor lots of dock, but better structure and less damage than other areas.
T80	w1g6	Y	N	Y	N	Y									Moderate	**NOT ecologically valuable.** Line of 5x oaks
T81	w1g (36)	3	1	3	3	3	3	2	3	2	2	1	1	1	Moderate (28)	Broad-leaved plantation with extensive damage/ areas of bare ground. Marked as priority habitat on MAGIC but not considered w1f.
T82	h2a	Y	Y	Y	N	N	Y	Y	N						Moderate	**Native sp. poor**
T83	w1g6	Y	N	Y	N	N									Poor	**Ecologically valuable.** Line of ash and oak trees, some potential ash dieback
T84	s (17)	N	N	Y											Poor	Tall ruderal vegetation - poor diversity and structure
T85	g3c	Y	Y	Y	Y	N	N								Moderate	Very lightly grazed.
T86	u1b5														n/a	Redundant buildings
T87	w1g (36)	2	3	3	3	3	3	2	2	2	2	1	1	2	Moderate (29)	Broad-leaved plantation, mostly early-mature trees with shrub layer in places
T88	g3c	Y	Y	N	N	N	N								Poor	High scrub encroachment and some damage
T89	h3d														n/a	Bramble-dominated scrub
T90	u1c														n/a	Bare ground with some pioneer vegetation - bare ground in BNG Metric
T91	c1														n/a	Milk pea crops w/ lots of bare earth
T92	h2a	Y	Y	Y	Y	Y	N	Y	N						Good	**Native sp. poor**
T93	h3a	N	Y	Y	Y	N									Moderate	Blackthorn-dominated scrub, radiating from hedgerow into grassland
T94	w1g (36)	2	3	3	3	3	3	2	2	2	2	1	1	2	Moderate (29)	Broad-leaved plantation, fairly species diverse
T95	h2a	Y	Y	Y	Y	Y	N	Y	Y	N	Y				Good	**Native sp. poor hedge w/ trees.** Unmanaged/ mature.
T96	g4	N	N	Y	N	N	Y	Y							Poor	Highly disturbed/damaged, very sp. poor.
T97	h2a	Y	Y	Y	Y	N	N	Y	N	N	Y				Moderate	**Native sp. poor hedge w/ trees.**
T98	h3h	Y	Y	N	N	N									Poor	Dense scrub, attached to woodland but not yet woodland
T99	h2a	Y	N	N	Y	Y	N	Y	Y						Moderate	**Native sp. poor**
T100	h2b														n/a	Leylandii hedge
T101	u1b														n/a	Hardstanding yard areas w/ some areas of pioneer vegetation too small to map

T102	h2b														n/a	Leylandii hedge
T103	g4	N	N	Y	N	Y	Y	Y							Poor	Modified grassland - previously cleared area? Damaged and sp. poor
T104	h2b														n/a	Leylandii hedge
T105	s (17)	N	N	Y											Poor	Tall ruderal vegetation - poor diversity, all same height
T106	w1g6	Y	Y	N	N	Y									Moderate	**Ecologically valuable line of trees associated w/ ditch**
T107	h2a	Y	Y	Y	N	Y	N	Y	Y	N	Y				Moderate	**Native sp. poor hedge w/ trees.** Continues on from line of trees.
T108	r (191)	Y	N	Y	N	N	N	N	Y						Poor	Dry ditch (but unseasonably dry weather) - ditch HCA undertaken. Precautionary pass of Criteria A + C.
T109	w1g (37)	2	3	3	3	3	1	1	3	1	1	1	1	1	Poor (24)	Small area of broad-leaved woodland, likely damaged and significantly reduced in size.
T110	w1g6	Y	N	N	N	Y									Poor	**NOT ecologically valuable.** Line of trees around private property
T111	h3h	Y	Y	Y	Y	Y									Good	Willow (dominant), blackthorn, oak. Young + dense. Clearings with typical marshy species e.g. soft rush and marsh thistle. Considered as mixed scrub for most suitable habitat type.
T112	r1a	Y	N	N	Y	N	Y	Y	Y	N					Poor	**Ponds: non-priority habitat. Small ornamental pond, quite overgrown. Assuming fail for criterion E as artificially lined. Pond 15 - does not contain GCN.**
T113	ub1														n/a	Old building/ foundations etc
T114	g4	N	Y	N	N	Y	Y	Y							Poor	Modified grassland - lots of damaged areas, scrub encroachment. However, varied structure.
T115	r1 (39)														Poor	Drainage feature (artificial pond) - no value for wildlife - no HCA undertaken and assumed poor.
T116	r1a (19)	Y	N	Y	Y	N	Y	Y	N	Y					Moderate	Pond (priority habitat). Dry at the time of the survey. Precautionary pass of Criterion A. Pond 16 - contains GCN.
T117	g4	N	N	Y	N	Y	Y	Y							Poor	Modified grassland, damaged, poor structure.
T118	h2a	Y	N	N	N	N	N	Y	N						Poor	**Native sp. poor.** Defunct.
T119	r (191)	Y	N	Y	N	N	N	N	Y						Poor	Dry ditch (but unseasonably dry weather) - ditch HCA undertaken. Precautionary pass of Criteria A + C.
T120	w1g (37)	2	3	3	3	3	2	2	3	1	1	1	2	1	Moderate (27)	Very narrow band of woodland - verging on treeline but more than a single row
T121	w1g6	N	N	Y	N	Y									Poor	**Line of trees (not ecologically valuable** due to high percentage of Leylandii + cherry laurel shrubs)
T122	h2b														n/a	Predominantly cherry laurel
T123	g4	N	N	Y	N	Y	Y	Y							Poor	Modified grassland, damaged, poor structure.
T124	w1f (37)	3	3	2	3	3	2	2	3	3	3	1	2	2	Moderate (32)	PRoW through centre. Cotoneaster recorded Ancient woodland indicators inc. dog's mercury and bluebell.
T125	r (191)	Y	N	Y	N	N	N	N	Y						Poor	Dry ditch (but unseasonably dry weather) - ditch HCA undertaken. Precautionary pass of Criteria A + C.

T126	g3c	Y	N	Y	Y	N	N								Moderate	Just been cut - assumed to hit Criterion A as a precaution.
T127	r (191)	Y	N	Y	N	N	N	N	Y						Poor	Dry ditch (but unseasonably dry weather) - ditch HCA undertaken. Precautionary pass of Criteria A + C.
T128	w1g (37)	2	3	3	3	3	2	2	3	1	1	1	2	1	Moderate (27)	Very narrow band of woodland - verging on treeline but more than a single row
T129	u1b														n/a	Hardstanding yards/ properties etc.
T130	g4	Y	N	Y	N	Y	Y	Y							Moderate	Contains some rush sp. Update visit on 17-02-2023
T131	h2a	Y	N	Y	Y	N	N	Y	Y						Moderate	**Native sp. poor hedge.**
T132	Individual trees														Moderate	4x mature (on boundary but rooted on-Site)
T133	u1b5														n/a	Various farm buildings, houses, sheds etc.
T134	Individual trees														Moderate	15x mature + 5x s.mature trees
T135	h2a	Y	Y	N	N	N	N	Y	N						Poor	**Native sp. poor associated w/ (dry) ditch**
T136	r (191)	Y	N	Y	N	N	N	N	Y						Poor	Dry ditch (but unseasonably dry weather) - ditch HCA undertaken. Precautionary pass of Criteria A + C.
T137	21	N	Y	Y	N	Y	N	N	Y						Moderate	Remnants of traditional orchard w/ 8x apple/ plum trees. On managed grassland.
T138	u1 (231)														n/a	Amenity grassland/ vegetated garden.
T139	g4	Y	N	Y	N	Y	Y	Y							Moderate	Update visit by on 17-02-2023
T140	u1 (231)														n/a	Urban garden
T141	Individual trees														Moderate	8X small individual trees
T142a	h3h	Y	Y	N	N	N									Poor	Scattered scrub around former pond/ marshy area
T142b	r1a	Y	N	Y	Y	Y	Y	Y	Y	N					Moderate	Ponds: non-priority habitat. Dry at the time of the survey and inundated predominantly with reedmace and water pepper. Precautionary pass of Criterion A. Pond 6 - no GCN.
T143	w1g (37)	2	3	3	3	3	2	2	3	2	2	1	1	2	Moderate (29)	Narrow band of woodland containing River Mole. Predominantly broadleaved species with occasional Scots pine.
T144	g4	Y	N	Y	Y	N	N								Moderate	Sp. poor marshy grassland containing water pepper, soft rush, purple loosestrife etc. Ultimately part of the wider g4, just wetter.
T145	Individual trees	Y	N	N	N	N	Y								Moderate	~10x scattered hawthorn bushes (small)
T146	h2a	Y	Y	Y	Y	N	Y	Y	Y						Good	**Native sp. poor**
T147	w1g6	Y	N	Y	N	N	Y								Poor	**Ecologically valuable line of trees assoc. w/ (dry) ditch.** Some shrubby Rhododendron.
T148	r (191)	Y	N	Y	N	N	N	N	Y						Poor	Dry ditch (but unseasonably dry weather) - ditch HCA undertaken. Precautionary pass of Criteria A + C.

T149	h2a	Y	N	Y	N	N	N	Y	N						Poor	**Native sp. poor**
T151	h2a	Y	N	N	N	N	N	N	N						Poor	**Native sp. poor.** Some Leylandii. Defunct garden boundary hedge.
T223	w1g6	Y	Y	Y	N	Y									Moderate	**Line of trees assoc. w/ (dry) ditch. Ecologically valuable.** Verging on woodland.
T224	Individual trees	Y	N	N	N	Y	Y								Moderate	5x small fruit trees but not considered orchard - considered good for inverts as food source
T242	h2b														n/a	**Sp. poor ornamental** garden hedgerows.
T243	s (17)	N	N	Y											Poor	Tall ruderal vegetation - poor diversity and structure
T244	h2a	Y	Y	Y	Y	N	N	Y	Y	N	Y				Good	**Native sp. rich w/ trees**
T245	g4	N	N	Y	N	Y	Y	Y							Poor	Very sp. poor and short sward. Damaging farming activities.
T246	h2a	Y	N	Y	Y	Y	N	N	Y						Moderate	**Native sp. poor.** Intact. Rhododendron present.
T247	w1g6	Y	N	Y	N	N									Poor	**Lines of trees. Ecologically valuable.** Join with woodland to the north.
T248	s (17)	N	N	Y											Poor	Tall ruderal vegetation - poor diversity and structure
T249	w1g (37)	2	3	3	3	3	1	1	3	1	1	1	1	1	Poor (24)	Small and urban area of B-L s.nat woodland.
IFIELD GOLF COURSE																
T152	w1g6	Y	N	Y	N	Y									Moderate	Ecologically valuable line of trees on fairway (no longer individual trees) - ~45x young to mature. Average size medium. Mostly B-L w/ 3x coniferous.
T153	Individual trees	Y	N	Y	N	Y	Y								Moderate	Cluster of 8x s.mature - mature trees. B-L and coniferous.
T154	g4	N	N	Y	N	N	Y	Y							Poor	Amenity grassland constituting managed section of golf course (green/ fairways etc). Short sward and disturbed. Sp. poor. No bare ground.
T155	w1g (36)	2	3	3	2	3	2	2	2	1	1	2	1	2	Moderate (26)	Broadleaved plantation woodland. Young.
T156	h3h	N	N	Y	Y	Y									Moderate	Merges with woodland (T155) and grassland (T157). Scattered scrub.
T157	g3c	Y	Y	N	N	N	N								Poor	Poor SI w/ some encroachment from scrub/ self-seeded oak saplings
T158	h2a	Y	N	N	N	Y	Y	Y	N	N	Y				Poor	Native sp. poor hedge w/ trees assoc. w/ (dry) ditch
T159	r (191)	Y	N	Y	Y	N	N	N	Y						Poor	Ditch holding small volume of water
T160	s (17)	N	N	Y											Poor	Tall ruderal vegetation on Ifield Golf Course around ditch - poor diversity and structure
T161	h2a	Y	N	N	N	N	N	Y	N	N	Y				Poor	Native sp. poor hedge w/ trees assoc. w/ (dry) ditch. Sparse.
T162	h2a	Y	Y	N	N	Y	Y	Y	Y	N	Y				Good	Native sp. rich hedge w/ trees assoc. w/ (dry) ditch. Sparse in places.
T163	r (191)	Y	N	Y	N	N	N	N	Y						Poor	Dry ditch (but unseasonably dry weather) - ditch HCA undertaken. Precautionary pass of Criteria A + C.
T164	g3c	Y	Y	Y	N	N	N								Moderate	

T165	Individual trees	Y	Y	N	N	N	Y								Moderate	Cluster of 9x s.mature Scots pine
T166	w1g (37)	3	3	2	3	3	2	3	3	3	3	2	3	2	Good (35)	B-L semi natural woodland with PRoW and dry ditch through centre. Links with T124. Marked as priority habitat on MAGIC but not considered to meet definition of HPI.
T167	r1a (19)	Y	N	Y	Y	Y	Y	Y	N	N					Moderate	Pond (priority habitat). Dry at the time of the survey. Surrounded by several individual willow trees. Precautionary pass of Criterion A. Pond 3b - contains GCN.
T168	w1g6	Y	N	Y	N	Y									Moderate	NOT ecologically valuable. Approx 27x B-L trees, average size medium. Line of trees rather than individual.
T169	r1a (19)	Y	N	Y	Y	Y	Y	Y	Y	N					Moderate	Pond (priority habitat). Largely dry at the time of the survey. Precautionary pass of Criterion A. Pond 3 - contains GCN.
T170	Individual trees	Y	Y	N	N	N	Y								Moderate	Cluster of 17x Scots pines (s. mature/ medium)
T171	g3c	Y	N	N	Y	N	N								Poor	
T172	Individual trees	Y	N	N	N	Y	Y								Moderate	Cluster of 4x s.mat oaks
T173	g3c	Y	Y	Y	N	N	N								Moderate	
T174a	r (191)	Y	N	Y	N	N	N	N	Y						Poor	Dry ditch (but unseasonably dry weather) - ditch HCA undertaken. Precautionary pass of Criteria A + C.
T174b	r (191)	Y	N	Y	N	N	N	N	Y						Poor	Dry drainage channel network (but unseasonably dry weather) - ditch HCA undertaken. Precautionary pass of Criteria A + C.
T175	h2a	Y	N	N	N	N	N	Y	N						Poor	Native sp. poor. Short span of beech hedge along woodland edge. Defunct.
T176	w1g (37)	3	3	3	3	3	2	2	2	2	2	2	2	2	Moderate (31)	Narrow band of B-L s.nat woodland
T177	w1f (33, 37)	3	3	3	3	3	3	3	3	2	2	2	2	2	Good (34)	Large areas of B-L snat woodland . Moderate species diversity. Listed as ancient and s-n on MAGIC.
T178	w1g (37)	3	3	3	3	3	2	3	3	2	2	1	1	2	Moderate (31)	Parcel of B-L s.nat woodland. Some damaging activities w/ track through middle. Marked as priority woodland habitat on MAGIC but not considered w1f as does not meet criteria for HPI.
T179	Individual trees														Moderate	Approx. 30x scattered B-L trees, average size medium. Now included as part of woodland.
T180	g1c														n/a	Area of bracken on woodland edge
T181	g3c	Y	Y	N	N	N	N								Poor	
T182	h2a	Y	N	N	N	N	Y	Y	N	Y	Y				Moderate	Native sp. rich hedge w/ trees assoc. w/ (dry) ditch.
T183	w1g (36)	2	3	3	3	3	2	1	3	2	2	1	1	1	Moderate (27)	Mixed plantation woodland. 60% B-L/ 40% coniferous.
T184	w1g (37)	1	3	3	3	3	1	1	3	2	1	1	1	1	Poor (24)	B-L s.nat woodland. Remnant of larger area.
T185	Individual trees	Y	N	N	N	N	Y								Moderate	Cluster of 3x pine trees.
T186	w1g (36)	2	3	3	3	3	3	2	3	2	2	1	1	2	Moderate (30)	B-L plantation woodland with occasional coniferous species (Scots pine)

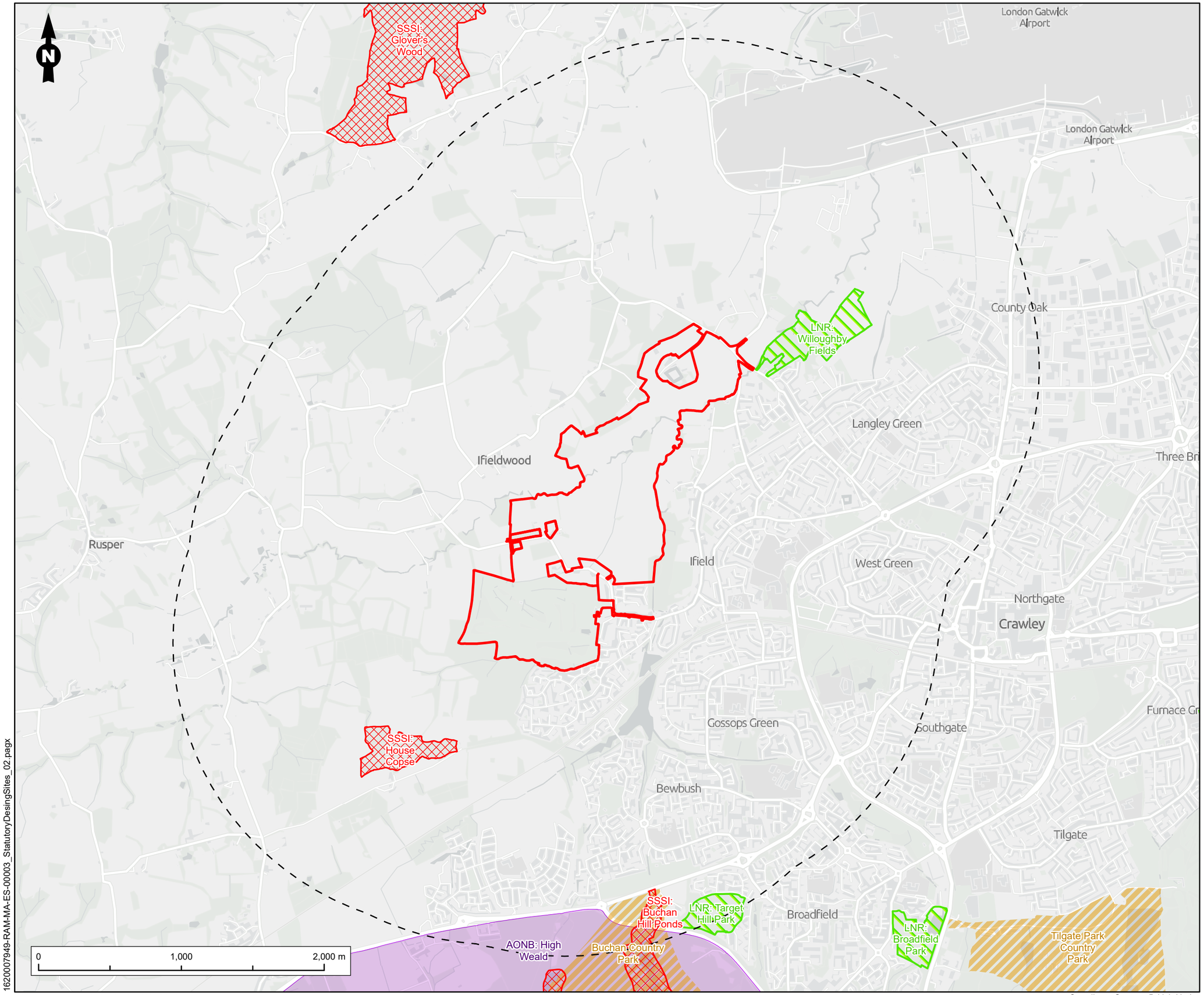
T187	g3c	Y	Y	Y	N	N	N								Moderate	
T188	Individual trees	Y	N	N	N	Y	Y								Moderate	5x B-L trees, average size medium.
T189a	g3c	Y	Y	Y	N	N	N								Moderate	With scattered trees in centre. Mapped as g3c with individual trees on top.
T189b	Individual trees	Y	Y	N	Y	Y	Y								Moderate	Indiv. Trees - not quite woodland.
T190	r1a	Y	N	Y	N	Y	N	Y	Y	N					Poor	Ponds: non-priority habitat. Dry at the time of the survey and inundated w/ reedmace. Connected to network of dry ditches. Contains Crassula. Precautionary pass of Criterion A. Pond 2 - no GCN.
T191	Individual trees	Y	Y	N	N	N	Y								Moderate	11x small pine trees
T192a	g3c	Y	Y	Y	N	N	N								Moderate	Woodland edge
T192b	w1g (36)	1	3	3	2	3	2	1	3	2	1	1	1	2	Poor (25)	Young B-L plantation woodland.
T193	w1g (36)	2	3	1	2	2	2	2	3	2	2	1	1	1	Poor (24)	B-L s.nat woodland with some damage + undesirable species (Buddleja + horsetail)
T194	u1b5														n/a	Buildings (with H.S. T220)
T195	s (17)	Y	N	N											Poor	Tall ruderal vegetation in yard area in Ifield Golf Course. Decent structure, but Buddleja present.
T196	g3c	Y	Y	Y	N	N	N								Moderate	
T197	Individual trees	Y	N	N	N	Y	Y								Moderate	4x B-L trees, average size medium, several young trees on fairway.
T198	w1g (37)	2	3	3	3	3	2	2	3	2	2	1	1	1	Moderate (28)	V narrow band of B-L s.nat woodland - more than line of trees.
T199	w1g (37)	2	3	2	3	3	1	2	3	2	2	2	1	1	Moderate (27)	Disturbed section of woodland
T200	w1g (36)	2	3	2	3	3	1	2	3	2	2	1	1	1	Moderate (26)	Mixed plantation, lots of disturbance. Buddleja present.
T201	w1g (37)	2	3	2	3	3	1	2	3	2	2	2	1	1	Moderate (27)	Disturbed section of woodland, predominantly oak + hazel. Dry ditch through centre.
T202	w1g (36)	2	2	3	3	3	2	1	3	2	2	1	2	1	Moderate (27)	Young B-L plantation woodland.
T203	Individual trees	Y	N	Y	N	Y	Y								Moderate	5x large oak trees
T204	w1g (37)	1	3	3	3	3	1	1	3	2	1	1	1	1	Poor (24)	Small area of B-L s.nat woodland. Marked as priority woodland habitat on MAGIC but not considered w1f due to damage/disturbance and poor condition.
T205	g3c	Y	Y	N	Y	Y	N								Moderate	Low herb density but good grasses
T206	w1g (36)	1	2	3	3	3	3	2	3	2	1	1	1	2	Moderate (27)	B-L plantation woodland - all trees same age.
T207	w1g6	Y	Y	Y	N	N									Moderate	Line of trees assoc. w/ (dry) ditch. Ecologically valuable. Small leaved lime tree recorded.
T208	w1g (36)	2	3	3	3	3	2	2	3	2	1	1	1	2	Moderate (28)	B-L plantation woodland.

T209	w1g6	Y	Y	Y	N	N									Moderate	Line of trees assoc. w/ (dry) ditch. Ecologically valuable.
T210	w1g (36)	1	3	3	2	3	2	1	3	2	1	1	1	2	Poor (25)	Young B-L plantation woodland.
T211	Individual trees	Y	N	N	N	Y	Y								Moderate	7x individual trees (medium)
T212	Individual trees	Y	Y	N	Y	N	Y								Moderate	8x small oak trees scattered on top of g3c
T213	s (17)	N	Y	Y											Moderate	Tall ruderal vegetation - no INNS
T214	g3c	Y	Y	N	N	N	N								Poor	With pine trees scattered on top. Mapped as g3c with individual trees on top.
T215	g3c	Y	Y	N	N	N	N								Poor	
T216	w1g (36)	2	2	3	3	3	2	1	3	2	2	1	2	2	Moderate (28)	Mature B-L plantation woodland. Marked as priority woodland habitat on MAGIC but not considered w1f as it does not meet criteria for HPI.
T217	w1g (36)	1	2	3	3	3	3	1	3	2	1	1	1	2	Moderate (26)	B-L plantation woodland.
T218	w1g (36)	1	2	3	3	3	3	1	3	2	1	1	1	2	Moderate (26)	B-L plantation woodland.
T219	w1f (37)	3	3	3	3	3	3	3	3	2	3	1	2	3	Good (35)	B-L s.nat woodland (surrounded by plantation). Wild service tree identified. Marked as priority woodland habitat on MAGIC.
T220	u1b														n/a	H.S. (with T194)
T221	w1g (36)	1	2	3	3	2	3	1	3	2	2	1	1	2	Moderate (26)	Mixed plantation woodland.
T222	r1a	N	N	Y	Y	Y	Y	Y							Moderate	Ponds: non-priority habitat. Holding water. In woodland edge. Fairly bare/ overshaded margins. Pond 5 - no GCN.
T225	u1b5														n/a	Various buildings inc Ifield Golf Course clubhouse, stores, pump house, residential etc
T226	u (1160)														n/a	Introduced shrub (secondary code 1160)
T227	h2a	N	N	Y	Y	N	N	Y	N						Poor	Native sp. poor (beech dominated).
T228	w1g (37)	2	3	1	3	2	2	1	3	2	2	1	1	1	Poor (24)	Tiny parcel of B-L s.nat woodland. Some possible garden escapees.
T229	g3c	Y	Y	N	N	N	N								Poor	
T230	Individual trees	Y	N	Y	N	Y	Y								Moderate	8x individual trees (ave. large)
T231	w1g (37)	2	3	1	3	2	2	1	3	2	2	1	1	1	Poor (24)	Tiny parcel of B-L s.nat woodland. Some laurel.
T232	g3c	Y	Y	N	N	N	N								Poor	
T233	r1a	N	N	Y	Y	N	Y	N	Y	Y					Poor	Ponds: non-priority habitat. Holding water. Lots of good vegetation but high stock of fish (including carp). Pond 4 - no GCN.
T234	w1g (37)	2	3	3	3	2	2	2	3	2	2	1	1	1	Moderate (27)	Small parcel of B-L s.nat woodland surrounding pond.
T235	h3h	Y	Y	Y	N	N									Moderate	Mixed scrub intervening woodland parcels

T236	w1g (36)	1	3	3	3	3	2	1	3	2	1	1	1	2	Moderate (26)	B-L plantation woodland.
T237	w1g (36)	1	3	3	3	3	3	2	3	2	2	1	1	2	Moderate (29)	Mixed plantation woodland.
T238	w1g (36)	2	3	3	3	3	3	2	3	2	2	1	1	2	Moderate (30)	B-L plantation woodland. Occ. coniferous trees.
T239	g3c	Y	Y	N	N	N	N								Poor	With small/ medium scattered trees
T240	Individual trees	Y	N	N	N	Y	Y								Moderate	Trees in carpark.
T241	Individual trees	Y	N	N	N	Y	Y								Moderate	Line of coniferous trees in carpark
T250	u1c														n/a	Sandpits on Ifield Golf Course + other areas of unvegetated/unsealed ground
T251	u1b														n/a	Hardstanding near Ifield Golf Course entrance
T252	g4	N	N	Y	N	Y	Y	Y							Poor	Amenity grassland in carpark area of Ifield Golf Course. V sp. poor and damaged. V short mown.
T253	h3h	Y	N	Y	Y	Y									Moderate	Mixed scrub on grassland
T254	w1f (37)	3	3	3	3	3	3	3	3	2	2	2	2	2	Good (34)	Similar as T177 but not marked as ancient and s-n woodland on MAGIC. Marked as priority woodland habitat on MAGIC.
T255	w1g6	Y	N	N	N	Y									Poor	Ecologically valuable. Rough line of hazel, oak, crab apple - distinct from adjacent woodland.
T256	g4	N	N	Y	N	Y	Y	Y							Poor	Small lawned area, poorly managed
/	Individual trees	Y	N	N	Y	N	Y								Moderate	Small individual tree within the T256 polygon - not labelled individually
T257	u1c														n/a	
T258	w1g6	Y	Y	N	N	Y									Moderate	Ecologically valuable. Some disturbance of surrounding areas however
T259	h2a	Y	Y	Y	Y	N	N	Y	N						Moderate	Native sp. poor. Intact and well managed but right next to road.
EXTRA AREAS SURVEYED IN APRIL 2023																
1	g4	Y	N	Y	Y	N	Y	Y							Moderate	Grassland parcel 1 - adjacent to hedgerow
2	g4	Y	N	N	N	N	Y	Y							Poor	Grassland parcel 2 - other side of the road
3	g4	N	N	N	Y	N	Y	Y							Poor	Grassland parcel 3 - remaining area
Ditch 1	r (191)	Y	N	Y	N	Y	N	Y	Y						Poor	Ditches along northern side of hedgerow, adjacent to grass verge. In two sections but one HCA done for both.
/	u1b														n/a	Remaining areas of road/pavement are hardstanding - no HCA required
EXTRA AREA SURVEYED IN APRIL 2024																
T37	S (81)	Y	Y	Y											Good	previously classified as s(17). But re surveyed as bramble scrub

T111	g4	Y	Y	N	N	N	Y	Y						Moderate	
T246	h2a	Y	N	Y	Y	Y	N	N	Y					Moderate	
T130	g4	Y	N	Y	N	Y	Y	Y						Moderate	
T23	g4	Y	N	Y	N	Y	Y	Y						Moderate	
T15	g4	Y	N	Y	N	Y	Y	Y						Moderate	
T256	r1 (50)	Y	N	Y	Y	N	N	N	Y					Poor	Additional ditch running on the eastern boundary of the woodland. Holding water at the time of the survey.
T257	r1 (50)	Y	N	Y	Y	N	N	N	Y					Poor	Additional ditch running on the southern boundary of the woodland. Holding water at the time of the survey.
T258	r1 (50)	Y	N	Y	Y	N	N	N	Y					Poor	Additional ditch through the field holding water at the time of the survey.
T259	g3c	Y	N	Y	Y	N	Y	Y						Moderate	Grassland strips around the road in the northeast of the Site.
T260	g4	N	N	Y	Y	N	Y	Y						Moderate	Grassland strips around the road in the northeast of the Site.
T261	g3c	Y	N	Y	Y	N	Y	Y						Moderate	Grassland strips around the road in the northeast of the Site.
T262	g3c	Y	N	Y	Y	N	Y	Y						Moderate	Grassland strips around the road in the northeast of the Site.
T263	g4	Y	N	Y	Y	N	Y	Y						Moderate	Grassland strips around the road in the northeast of the Site.
T264	g4	Y	N	Y	Y	N	Y	Y						Moderate	Grassland strips around the road in the northeast of the Site.
T265	g4	Y	N	Y	Y	N	Y	Y						Moderate	Grassland strips around the road in the northeast of the Site.
T266	g4	Y	N	Y	Y	N	Y	Y						Moderate	Grassland strips around the road in the northeast of the Site.
T267	g4	Y	N	Y	Y	N	Y	Y						Moderate	Grassland strips around the road in the northeast of the Site.
T268	g4	Y	N	Y	N	N	Y	Y						Poor	Grassland strips around the road in the northeast of the Site.
T269	g4	N	N	Y	Y	N	Y	Y						Poor	Grassland strips around the road in the northeast of the Site.

APPENDIX 7
DESIGNATED SITES



Legend

- Site Boundary
- 2 km Buffer from Site Boundary

Designations

- Local Nature Reserve (LNR)
- Site of Special Scientific Interest (SSSI)
- Country Park
- Area of Outstanding Natural Beauty (AONB)

Figure Title
Existing Statutory Designated Sites within 2km

Project Name
West of Ifield

Project No./Filery ID
1620007949-003

Date	Figure No.	Revision
June 2025	7.1	1.0

Prepared By	Scale
MFT	1:25,000 @A3

Client
Homes England

RAMBOLL

1620007949-RAM-MA-ES-00003_StatutoryDesingSites_02.pagx

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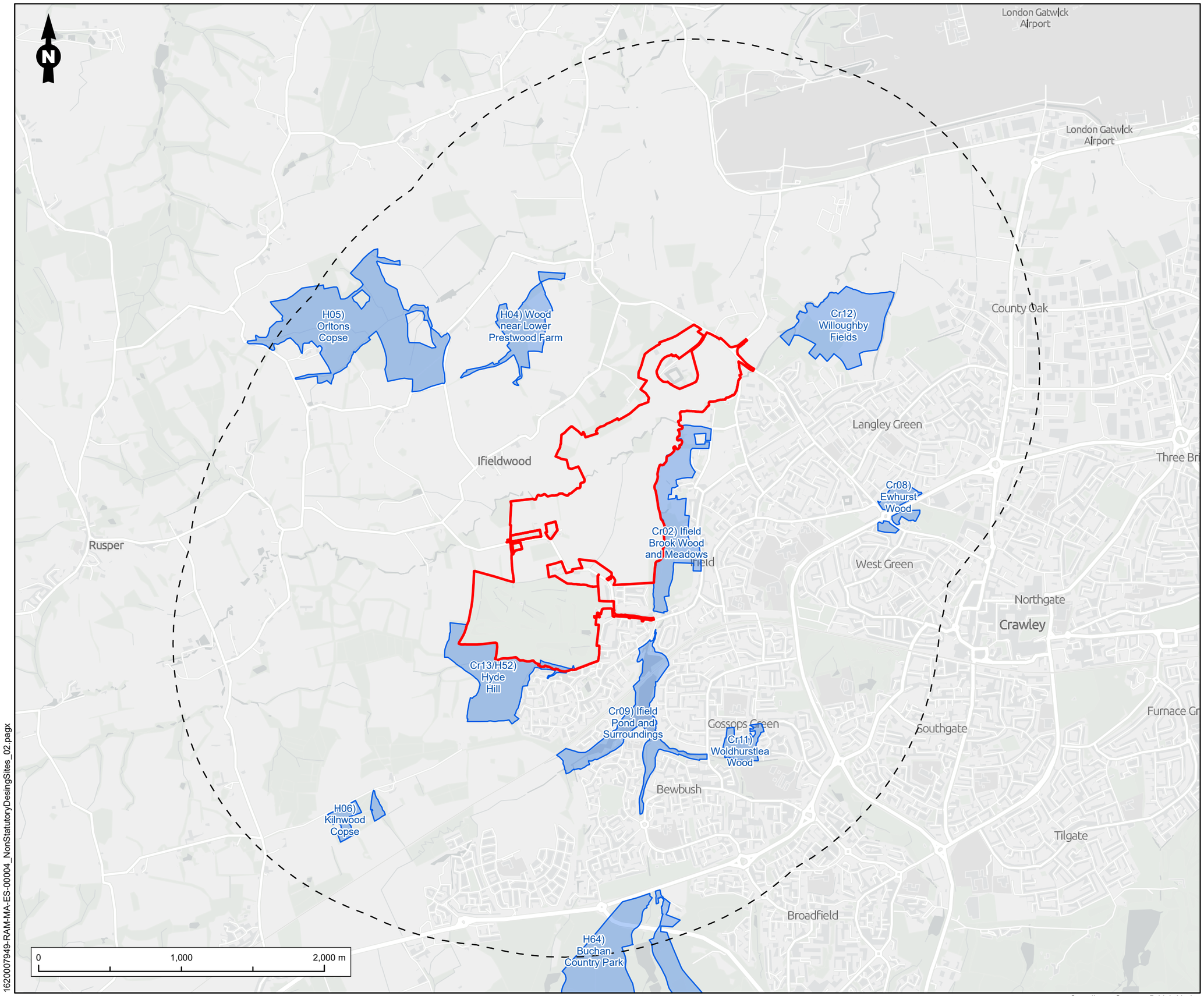

Legend

- Site Boundary
- 2 km Buffer from Site Boundary
- Local Wildlife Site

Figure Title
Existing Non-Statutory Designated Sites within 2km

Project Name
West of Ifield

Project No./Filery ID
1620007949-003

Date	Figure No.	Revision
June 2025	7.2	1.0

Prepared By	Scale
MFT	1:25,000 @A3

Client
Homes England

RAMBOLL

1620007949-RAM-MA-ES-00004_NonStatutoryDesingSites_02.pagx

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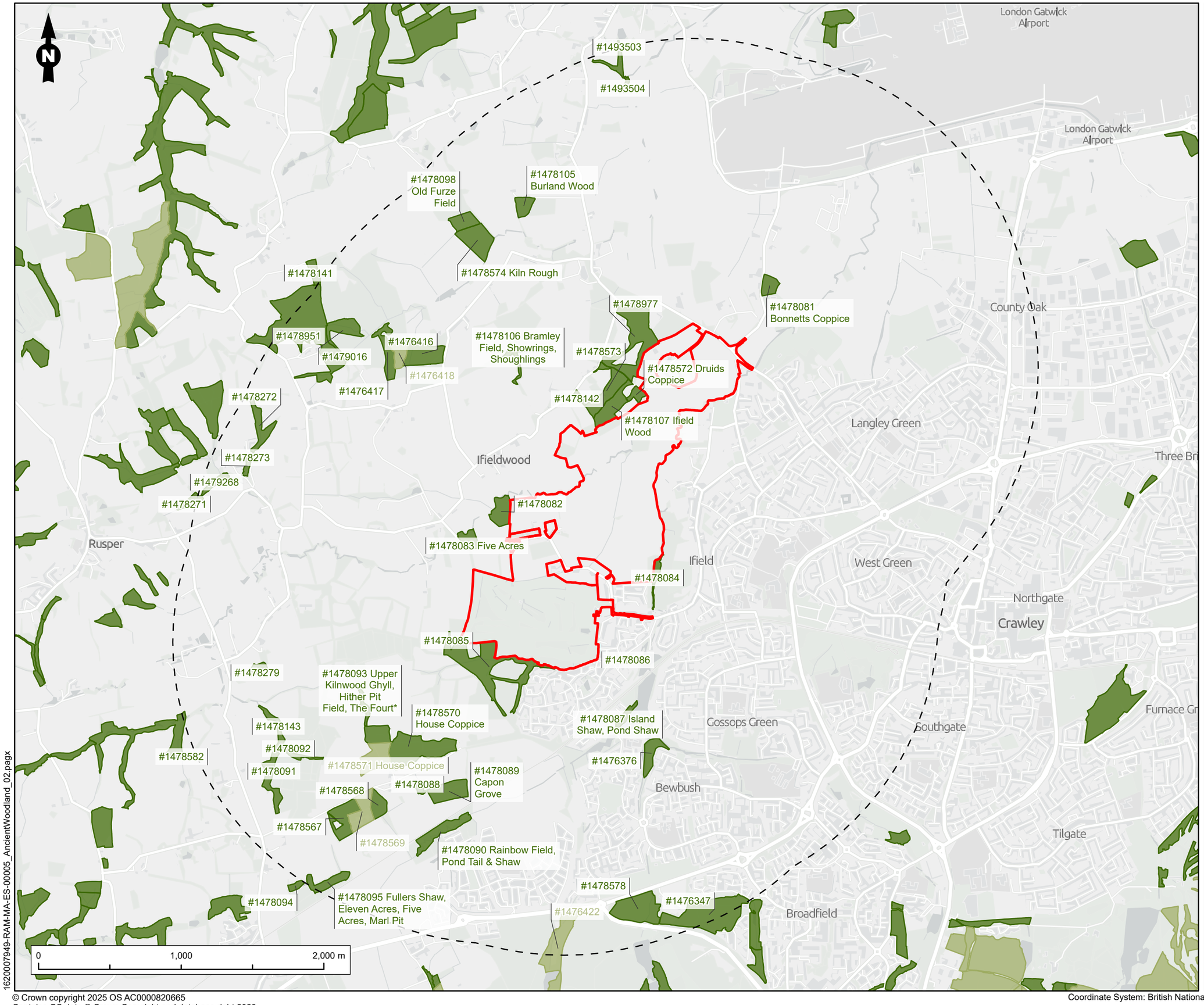

Legend

- Site Boundary
- 2 km Buffer from Site Boundary
- Ancient & Semi-Natural Woodland
- Ancient Replanted Woodland

Figure Title
Ancient Woodland within 2km

Project Name
West of Ifield

Project No./Filery ID
1620007949-003

Date	Figure No.	Revision
June 2025	7	1.0

Prepared By	Scale
MFT	1:25,000 @A3

Client
Homes England

RAMBOLL

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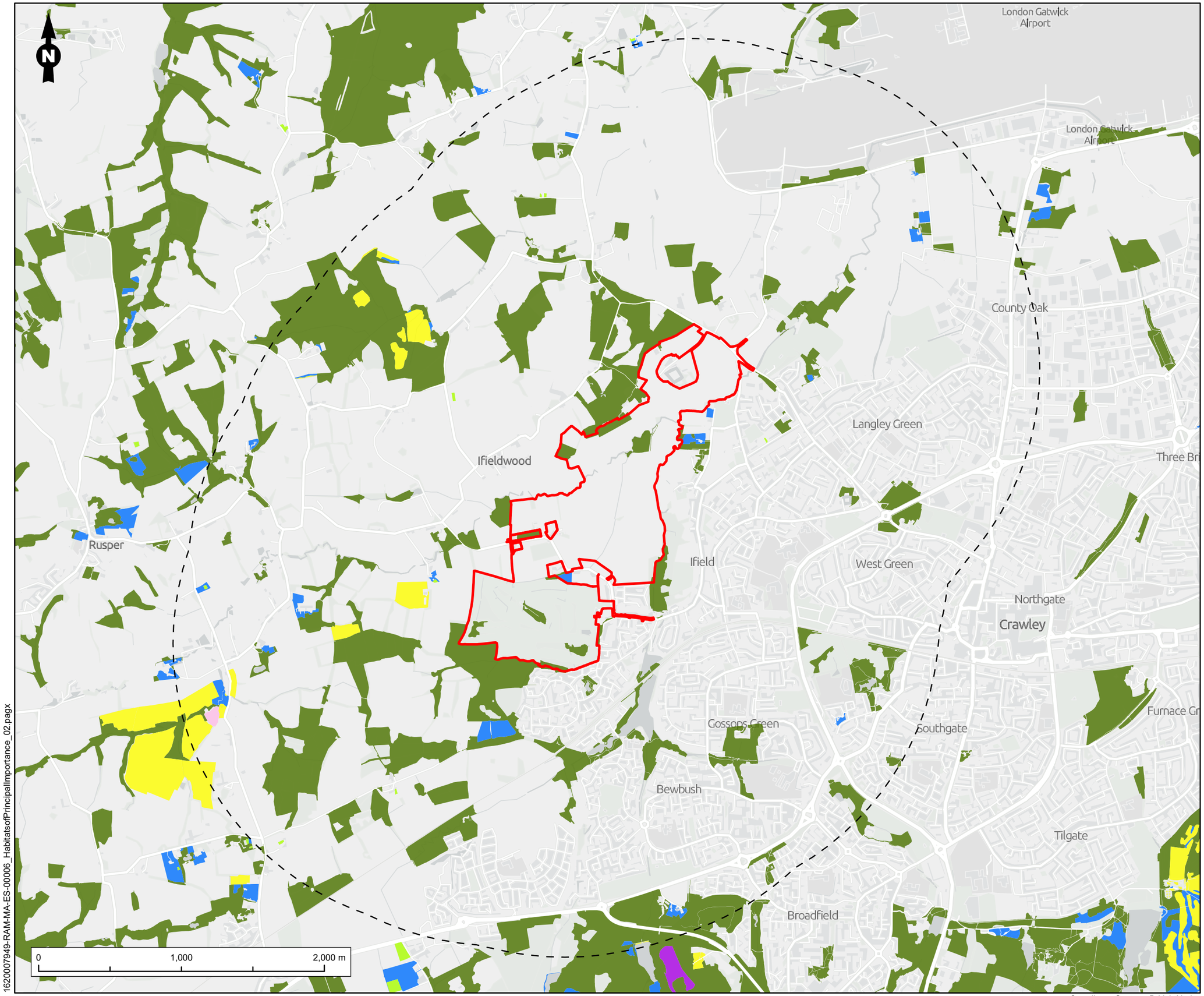

Legend

- Site Boundary
- 2 km Buffer from Site Boundary

Priority Habitat Inventory (PHI)

- Deciduous woodland
- Good quality semi improved grassland
- Lowland heathland
- Lowland meadows
- No main habitat but additional habitats present
- Traditional orchard

Figure Title
Habitats of Principal Importance within 2km

Project Name
West of Ifield

Project No./Filery ID
1620007949-003

Date	Figure No.	Revision
June 2025	7.4	1.0

Prepared By	Scale
MFT	1:25,000 @A3

Client
Homes England

RAMBOLL

1620007949-RAM-MA-ES-00006_HabitatsofPrincipalImportance_02.pagx

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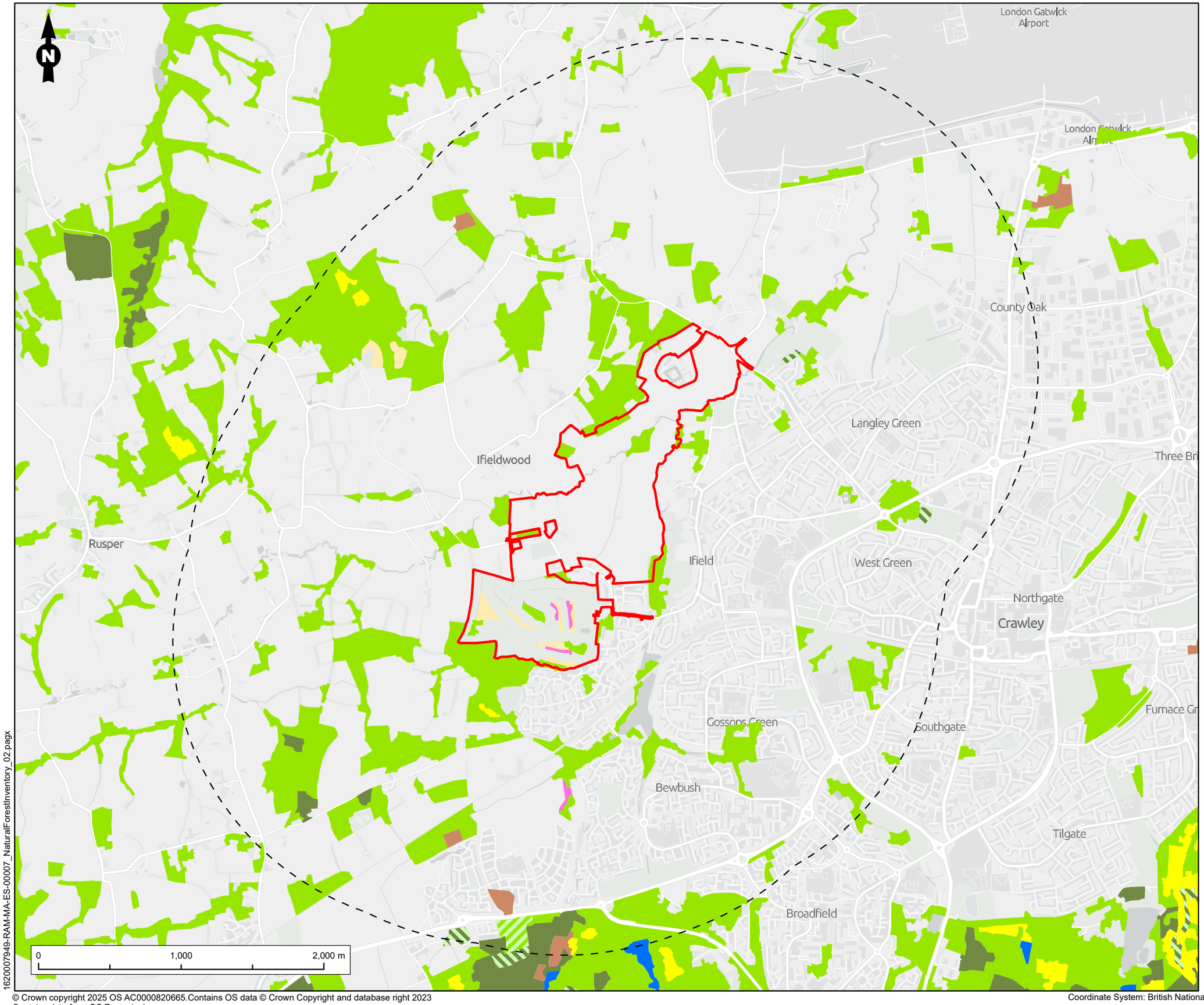

Legend

- Site Boundary
- 2 km Buffer from Site Boundary

National Forest Inventory (England)

Non-Woodland

- Grassland
- Open Water

Woodland

- Assumed Woodland
- Broadleaved
- Conifer
- Felled
- Mixed Mainly Broadleaved
- Mixed Mainly Conifer
- Young trees

Figure Title
National Forest Inventory within 2km

Project Name
West of Ifield

Project No./Filery ID
1620007949-003

Date	Figure No.	Revision
June 2025	7.5	1.0

Prepared By	Scale
MFT	1:25,000 @A3

Client
Homes England

RAMBOLL

1620007949-RAM-MA-ES-00007_NaturalForestInventory_02.pagx

Coordinate System: British National Grid. Projection: Transverse Mercator. Datum: OSGB 1936.

APPENDIX 8
ARCADIS BNG ASSESSMENT - DETAILED COMPONENT

Biodiversity Net Gain Assessment

West of Ifield - Phase 1 Infrastructure

JUNE 2025

Prepared By:

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Prepared For:

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Arcadis UK

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Reviewer – Brandon Murray

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Approver – Steph Davies

VERSION CONTROL

Version	Date	Author	Checker	Approver	Changes
1.0	29/05/2024	G. Parry	H. Corcoran	M. Girvan	N/A
2.0	29/08/2024	G.Parry	H. Corcoran	S Walters	
3.0	04/06/2025	P. Tonde, S. Jelil	B. Murray	S. Davies	

CONTENTS

TABLES

APPENDICES

1 Introduction

1.1 Background

This Biodiversity Net Gain report (BNG) assesses the potential change in biodiversity value of the West of Ifield Phase 1 Infrastructure scheme. It has been prepared by Arcadis Consulting (UK) Ltd (Arcadis) on behalf of Homes England as a requirement to support the planning application to Horsham District Council (HDC) for the construction of the enabling infrastructure at the West of Ifield site. This comprises the Crawley Western Multi-modal Corridor (Phase 1, including access from Charlwood Road and crossing points) and access infrastructure to enable servicing and delivery of secondary school site and future development, including access to Rusper Road (herein referred to as the 'Proposed Development'. This is a component of a hybrid application, the description of which is:

Hybrid planning application (part outline and part full planning application) for a phased, mixed use development comprising:

A full element covering enabling infrastructure including the Crawley Western Multi-Modal Corridor (Phase 1, including access from Charlwood Road and crossing points) and access infrastructure to enable servicing and delivery of secondary school site and future development, including access to Rusper Road, supported by associated infrastructure, utilities and works, alongside:

An outline element (with all matters reserved) including up to 3,000 residential homes (Class C2 and C3), commercial, business and service (Class E), general industrial (Class B2), storage or distribution (Class B8), hotel (Class C1), community and education facilities (Use Classes F1 and F2), gypsy and traveller pitches (sui generis), public open space with sports pitches, recreation, play and ancillary facilities, landscaping, water abstraction boreholes and associated infrastructure, utilities and works, including pedestrian and cycle routes and enabling demolition.

This hybrid planning application is accompanied by an Environmental Statement.

This hybrid planning application is for a phased development intended to be capable of coming forward in distinct and separable phases and/or plots in a severable way.

This report relates solely to the Phase 1 road redline, which is being submitted for full planning permission, and includes the enabling infrastructure including the Crawley Western Multi-Modal Corridor (Phase 1, including access from Charlwood Road and crossing points) and access infrastructure to enable servicing and delivery of secondary school site and future development, including access to Rusper Road, supported by associated infrastructure utilities etc.. This report should be read alongside the wider Land West of Ifield BNG report (Ramboll, 2025). This BNG assessment document identifies the baseline biodiversity value, and the proposed interventions to achieve a minimum of 10% net gain in biodiversity, of the footprint of the proposed development in relation to the Phase 1, the highways infrastructure, and does not include the wider proposed development site. Phase 1a and 1b are the initial proposed development activities for a project that shall be delivered in phases over several years.

Homes England intends to redevelop approximately 172 hectares (ha) of Land West of Ifield within the administrative area of Horsham District Council (HDC) which immediately abuts Crawley Borough Council (CBC) boundary in West Sussex for a residential-led mixed use development.

The area of the proposed Phase 1 infrastructure works is referred to in this report as 'the Site'. The area of the Site is approximately 29.5ha. Image 1 details the wider West of Ifield housing development site boundary and the footprint of the proposed Phase 1a and 1b infrastructure scheme is shown in Image 2.

Image 1: Land West of Ifield Outline application boundary

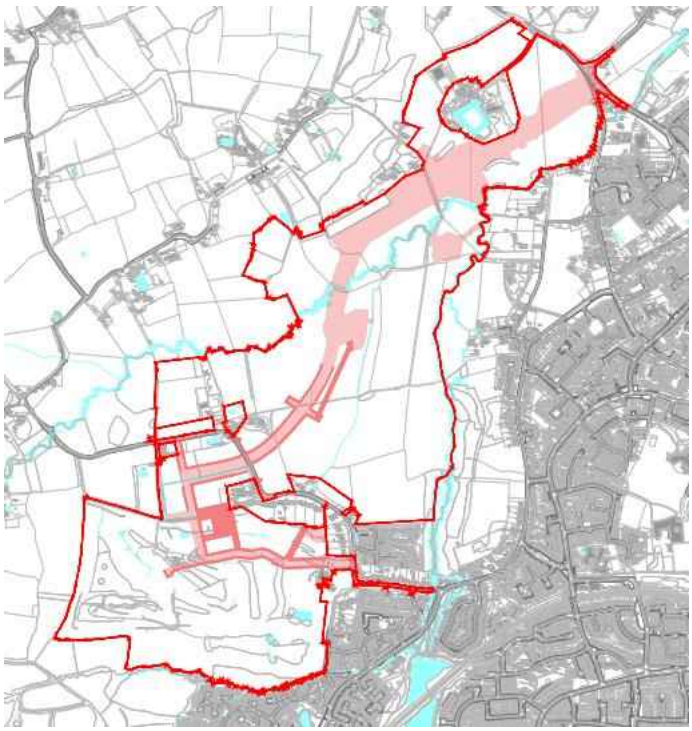


Image 2: Redline of the Phase 1a and 1b infrastructure detailed planning application

A habitat survey was completed by Ramboll in August 2022. Further surveys were completed in April 2023 and in 2025 by Ramboll due to changes to the red line boundary. Details of the updated 2022, 2023 and 2025

surveys can be found within the Ramboll West of Ifield Biodiversity Assessment Report (Ramboll, 2025). This report outlines the baseline value of the Site, and the measures required to achieve a minimum of 10% net gain in biodiversity post-development.

1.2 Site Location and Setting

The wider Land West of Ifield site covers approximately 172 ha and is located to the west of Ifield near Crawley in West Sussex (see Image 3). The wider Land West of Ifield site is bounded by Charlwood Road in the north, beyond which lies Gatwick Airport. The site comprises predominantly agricultural land in the northern and central areas (dominated by arable and grazed pasture fields) and Ifield Golf Course in the south. A range of habitats are present throughout the site including grassland, woodland, scrub, a network of hedgerows and lines of trees and ponds. The River Mole flows west to east through the northern half of the site. The detailled application site for Phase 1 occupies approximately 29.5 ha through the centre of the proposed Development and is centred at Ordnance Survey (OS) Grid Reference TQ 24270 37769, at postcode RH11 0EL.

Image 3: Aerial imagery of the area within which Land West of Ifield is proposed to be constructed.

1.3 BNG in Policy and Legislation

In line with the 25 Year Plan for the Environment (HM Government, 2018) and the National Planning Policy Framework (MHCLG, 2024), new development should identify and pursue opportunities for securing measurable net gains for biodiversity and for the wider environment. The Environment Act 2021 followed by the Biodiversity Gain Site Register Regulations 2024 mandate the requirement for 10% Biodiversity Net Gain (BNG) for new developments in England from 12 February 2024. This has been inserted into Schedule 7A of the Town and Country Planning Act 1990 (by Schedule 12 of the Environment Act 2021). BNG is measured using the Statutory BNG Metric and guidance documents published by DEFRA.

2 Methodology

2.1 Baseline Data

A habitat survey was completed by Ramboll between 9 and 11 and 22 and 24 August 2022. Further surveys were completed in April 2023 and in 2025 by Ramboll due to changes to the red line boundary. Details of the updated 2022, 2023 and 2025 survey can be found within the Ramboll West of Ifield Biodiversity Assessment Report (Ramboll, 2025). Habitats were recorded using UK Habitat classification system (UKHab Ltd, 2023) and input into the Statutory Biodiversity Metric tool. Aerial imagery (Google Earth, 2024) and MAGIC mapping (MAGIC, 2024) were used to aid with UK Habitat classification.

All baseline habitat information utilised in this report is taken from the data collected by Ramboll. To avoid duplication, all baseline data details including condition assessments should be read from the Ramboll habitat survey report (Ramboll, 2025).

2.2 Biodiversity Metric

The purpose of this document is to estimate the potential net change in biodiversity value of the Phase 1 Site. This approach uses information on the habitats and features of the Site before and after the proposed habitat loss and mitigation through management to calculate a biodiversity value. This information was then used to calculate a change in the biodiversity value of the Site.

These calculations were undertaken using the Statutory Biodiversity Metric, a spreadsheet-based tool into which data can be entered to carry out BNG calculations (DEFRA, 2024a), following the corresponding User Guide (DEFRA, 2024b).

When considering baseline conditions, the metric takes account of several factors, detailed below in Table 1. The numbers in brackets show the multipliers used by the metric for each category.

Table 1: Biodiversity Metric Criteria

Evaluation	Values assigned	Criteria
Habitat type	UK habitat classification typologies. The unit for each of the habitat types is calculated and then multiplied by the size of this habitat. The unit number is based upon the habitat's distinctiveness, condition and strategic significance.	Based upon species richness, rarity (at local, regional, national and international scales), and the degree to which a habitat supports species rarely found in other habitats.
Size of habitat parcel	Area measured in hectares and linear features measured in kilometres.	N/A. The sizes of the different proposed habitats were calculated using a Geographical Information System (GIS) based on the habitats presented on the Baseline Habitat Map within Appendix A. The area taken up by rural trees throughout the Site was calculated using the tree helper tool within the metric.
The distinctiveness of the habitat type	Value predetermined for each habitat type on a scale of Very Low (0), Low (2), Medium (4), High (6) and Very High (8)	See Table 2 for distinctiveness criteria.
The condition of each habitat parcel	Value assigned based on a scale of Poor (1), Fairly Poor (1.5), Moderate (2), Fairly	The condition of the habitat is defined as: "the biological 'working-order' of a habitat type judged against the perceived ecological optimum state for

Evaluation	Values assigned	Criteria
	Good (2.5) and Good (3). For some habitat types this is pre-determined	that particular habitat." This provides a measure of variation in the quality of areas of the same habitat type.
Strategic significance	Value assigned based on a scale of Low (1), Medium (1.1) and High (1.15) strategic importance	Strategic significance assesses the value of habitats from the point of view of environmental objectives and preferred locations for biodiversity. The strategic significance has been used from the Ramboll BNG survey and report.

Table 2 provides details of the distinctiveness bandings to which each area-based habitat is assigned.

Table 2: Area based habitat distinctiveness valuation bandings.

Distinctiveness band	Multiplier	Typical habitats
Very High	8	Priority habitats as defined in Section 41 of the Natural Environment and Rural Communities (NERC) Act (HM Government, 2006) that are highly threatened, internationally scarce and require conservation action e.g. blanket bog. Small amount of remaining habitat with a high proportion unprotected by designation. Endangered or Critical European red list habitats.
High	6	Priority habitats as defined in Section 41 of the NERC Act (HM Government, 2006) requiring conservation action e.g., lowland fens. Remaining Priority Habitats not in very high distinctiveness band & other red list habitats.
Medium	4	Semi-natural habitats not classed as a Priority Habitat but with significant wildlife benefit, e.g., mixed scrub. One Priority Habitat (arable field margins).
Low	2	Habitat of low biodiversity value e.g., temporary grass and clover ley. Agricultural and Urban land of lower biodiversity value.
Very low	0	Little or no biodiversity value e.g., hard standing or sealed surface Urban – artificial structures which are un-vegetated, sealed surfaces or built linear features of very low biodiversity value.

2.3 Baseline Trees

To align with the Ramboll metric being produced for the wider Land West of Ifield outline application, tree areas were calculated using the tree helper tool in the metric. All trees were given a baseline condition of moderate (with the exception of one veteran tree that was given a condition of 'high'. This tree is identified as an irreplaceable habitat within the metric.

2.4 Post-Intervention Calculation

The Site was reassessed for the conditions that will be present under the post-development proposal. The post-intervention landscape plan used for this calculation is illustrated within Appendix B. The landscape strategy contains created habitats, enhanced habitats and retained habitats. For the created habitats, the proposed typologies need to be translated from landscaping typologies into UK Habs habitat types. The translation used in the metric is presented in Table 3 below.

For retained habitats, the baseline habitat and condition was utilised. For enhanced habitats, the habitat condition that would be achieved through management as part of the road scheme was utilised (this is explained in more detail later in this report).

Table 3: Translation of landscape habitat typologies to UK Habs habitat types

Landscape typology	UK Habs typology	Notes
Grass Swales and Attenuation ponds	Other neutral grassland	Considering the seeding mix in the landscape proposals, this will be akin to other neutral grassland in the post construction state.
Hardstanding, cycleway, footpath	Developed land; sealed surface	These areas are all tarmac or sealed surface
Ornamental Rain Garden	Rain garden (urban typology)	Considering the species list is predominantly ornamental species a urban typology rain garden was considered the correct habitat type.
Transitional Rain Garden	Rain garden (urban typology)	Although the species mix would suggest a grassland typology may develop within these areas,, considering the locations alongside the road it was considered that the urban rain garden typology was more appropriate in this situation.
Meadow Rain Garden	Other neutral grassland	Considering the seeding mix in the landscape proposals, this will be akin to other neutral grassland in the post construction state.
Woodland Planting	Other woodland, broadleaved	Considering the seed mix proposed for the ground floor and the tree species proposed, a broadleaved woodland was considered the appropriate typology.
Grass Seeding	Other neutral grassland	Considering the seeding mix in the landscape proposals, this will be akin to other neutral grassland in the post construction state.
Watercourse	Ditch or culvert, as appropriate	Two short sections of ditch with a culvert beneath the newly created rows are to be created

Landscape typology	UK Habs typology	Notes
Temporary seeding of embankments	Other neutral grassland	Considering the seeding mix in the landscape proposals, this will be akin to other neutral grassland in the post construction state.
Hawthorn Planting	Hawthorn scrub	Hawthorn scrub will be created
Trees planted along road alignment	Urban Tree	The size of these was assumed to be small, with the area calculated using the tree helper in the metric. The number of trees was calculated from the landscape drawing.

When considering post-intervention calculations, the metric takes account of several factors, detailed below in Table 4.

Table 4: Biodiversity Metric Post-Intervention Criteria

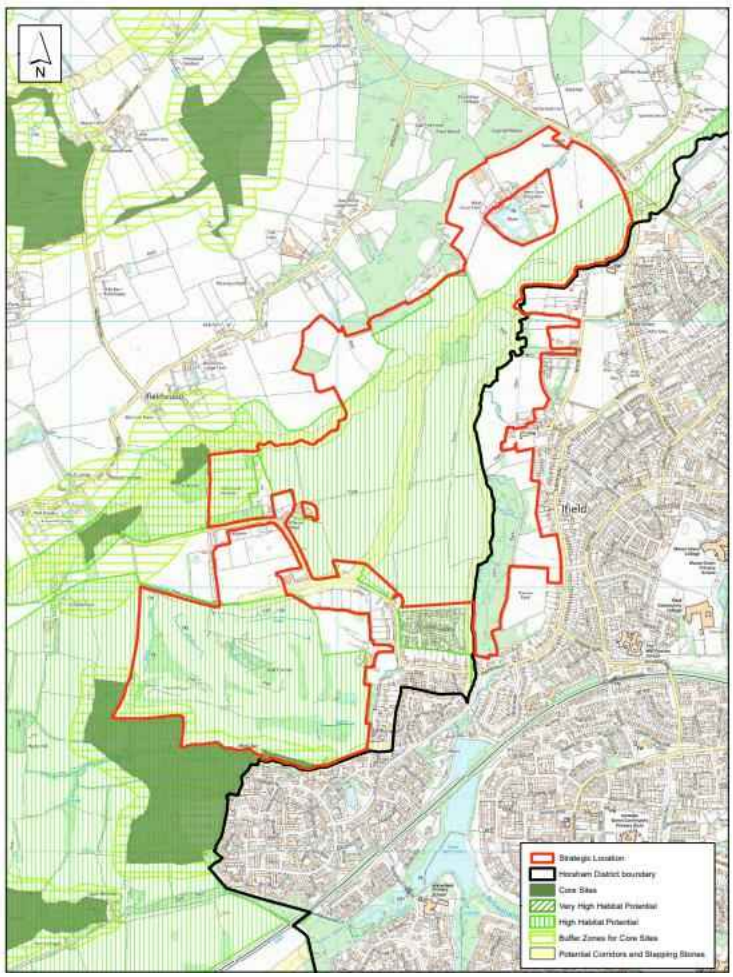
Factor	Criteria and Site-specific Condition
Difficulty categories	The number of biodiversity units provided by each habitat within the Site was calculated in the same way as the baseline habitats but with the following multipliers: Very high (0.1); High (0.33); Medium (0.67); Low (1). Difficulty categories are based on standard scores that reflect how difficult the habitat is to create or restore and temporal risk (how long the habitat type takes to establish).
Habitat Change	Different habitats change scenarios are attributed different levels of risk (risk around the confidence in the successful establishment of habitats) and different multipliers are applied to reflect this. Two distinct habitat change scenarios are recognised in the Statutory Biodiversity Metric: Habitat creation - where one habitat type is replaced by another or the habitat is destroyed (e.g., by development works) and the same habitat is recreated. Habitat enhancement - where its distinctiveness and / or condition are improved. Enhancement carries less risk and can therefore provide a greater unit uplift.
Spatial risk	A separate risk multiplier is applied to post-intervention sites outside of the Site. This incentivises the use of sites near the intervention site, for ecological and social reasons. Higher multipliers are assigned to more distant sites which results in a decrease in the value of an off-site location with increasing distance. At this stage, post-development interventions are all being undertaken within the Site boundary and the wider development site so spatial risks are not relevant.
Advanced and delayed habitat creation	Advanced habitat interventions are encouraged within the metric (along with being good practice), by reducing the multipliers associated with time to target condition. Similarly delayed habitat interventions are discouraged, with delays resulting in increased time to target condition.

Factor	Criteria and Site-specific Condition
'Pseudo' double counting areas	The total area input into the tool can be greater than the total area of the Site. This is due to the three-dimensional nature of certain habitats. For example, the area covered by a tree is approximately the area covered by its canopy, but if an area of grassland is underneath, both would be included in the metric. As such the area of the tree canopy is 'counted' twice and can result in the area in the metric being larger than the area of the Site.
Calculation of gains or losses	The net change in biodiversity or hedgerow units on and off-site is calculated within the tool by subtracting the baseline units from the post-intervention units. The overall net change is the sum of the change in units on-site and off-site. The percentage net gain is then calculated by dividing this overall net change by the number of baseline units on the Site
Changes in broad habitat type calculations	The UKHab classification system is hierarchical in structure, so specific habitat types can be grouped into broad habitat types. The changes in area and biodiversity units associated with each of these broad habitat types was calculated using the baseline and post-intervention data.
Areas excluded from the assessment	The metric is not designed to assess impacts to habitats within statutory designated sites or "irreplaceable" habitats. There are no irreplaceable habitats, such as ancient woodland, or statutory designated sites present within the Site and therefore all habitats were assessed.

2.5 Strategic Significance

Within the metric, the application of strategic significance was aligned with the BNG assessment of the wider site being conducted by Ramboll (Ramboll, 2025). The strategic significance for all baseline area-based habitat parcels and hedgerows within the Site that fall wholly or partially into the 'High Habitat Potential' area within the emerging Nature Recovery Network (NRN) for Horsham District Council has been determined as 'Formally identified in local strategy' (i.e. high strategic significance). The strategic significance for any baseline habitats and hedgerows outside of the 'High Habitat Potential' area within the NRN, have been determined as 'Location ecologically desirable but not in local strategy' (i.e. medium strategic significance). The NRN is shown below in Image 4.

Image 4: Horsham District Council emerging Nature Recovery Network used to inform the strategic significance



2.6 'Red Box' Errors

The Statutory Biodiversity Metric tool will show an ‘error’ flag or 'red box' error when a problem has been encountered and point the user to where this may have occurred. These could relate to mistakes or broken rules in any of the tabs of the Statutory Biodiversity Metric; 'red-box' errors can also be justified, for example, if it’s an outline application, if there are exceptional ecological circumstances, or if the plan is to purchase statutory credits from Natural England.

2.7 Watercourse information

All watercourse information was extracted from the Ramboll baseline. For further information on the condition assessments of these features please refer to the Ramboll Habitat Survey (Ramboll, 2025).

2.8 Overlap Areas

There are areas of ‘overlap’ the detailed application as part of Phase 1 and the subsequent development as part of the wider Land West of Ifield scheme. These areas are predominantly where land will be utilised for the road construction but may then subsequently be redeveloped as part of the wider Land West of Ifield development. Within this metric, the post-construction habitats of these areas are assumed to be as it would be upon the completion of the Phase 1 scheme. This is considered appropriate as this will be the status should subsequent developments not commence.

2.9 Delay to starting habitat creation or enhancement

Within the metric, a two-year delay has been applied to all habitat creation and enhancement in line with the proposed construction timeline. This matches the delay applied in the Ramboll metric (Ramboll, 2025).

2.10 Limitations

The habitat data was collected using the metric 4.0 condition assessments methodology, but since this time the Statutory Biodiversity Metric was released and has been used to assess the baseline and post-intervention biodiversity value. The condition assessments for each habitat have not changed between metric 4.0 and the statutory metric so no conversion was required for the habitat condition assessments and no differences are expected. Update surveys have been conducted accruing to the Statutory Metric approach.

Survey data from Ramboll has been used to calculate the biodiversity baseline of the Site, there were limitations with those assessments in terms of extreme drought conditions for the distinctiveness and habitat condition assessments, particularly the grasslands. The distinctiveness and condition of the habitats have not been confirmed by Arcadis. Neither have they been agreed with the Local Planning Authority.

3 Results

3.1 Baseline

This section details the UK Habitat Classification typologies and their condition and strategic significance scores. The condition assessments for each of the habitat areas is detailed in Appendix D.

The Site predominantly comprised fields of modified grassland, cereal crops and other neutral grassland. The fields are bordered by hedgerows, mixed scrub and parcels of other broadleaved woodland and lowland mixed deciduous woodland. The baseline habitats are displayed in the Baseline Habitat Plan in Appendix A. Table 5 provides a summary of each habitat type within the Site boundary and the conditions. A full description of the habitats, including species, present within the Site is provided in the Ramboll West of Ifield BNG Assessment Report (Ramboll, 2025).

While there are areas of ancient woodland and designated sites within the wider site, these areas are not within the redline boundary of the Phase 1 infrastructure works, referred in this report as the Phase 1 Site.

Table 5 details the baseline habitats and their size and condition. A breakdown of the different condition assessments and strategic significance can be found within the BNG calculator appended as Appendix C.

Table 5: Baseline Habitat Typology and Condition Summary)

Habitat	Total Area (ha)/ Length (km)	Condition
Artificial unvegetated, unsealed surface	0.132626	N/A
Cereal crops	5.152063	N/A
Developed land; sealed surface	1.972251	N/A
Lowland mixed deciduous woodland	0.022929	Moderate / Good
Mixed scrub	0.675659	Poor / Moderate / Good
Modified grassland	18.00056	Poor / Moderate
Other neutral grassland	1.700296	Poor / Moderate
Other woodland; broadleaved	1.632571	Moderate / Good
Sparsely vegetated land	0.067014	Poor / Moderate / Good
Total Area	**29.337**	**N/A**
Species-rich native hedgerow with trees	0.774 km	Poor / Moderate / Good
Line of trees	0.258 km	Moderate
Non-native and ornamental hedgerow	0.107 km	Poor
Other river and streams	0.05 km	Fairly Good
Ditches	1.13 km	Poor
Total Length	**2.32 km**	**N/A**

3.2 Post Intervention Habitat Change

Several habitats on the Site are proposed to change to facilitate the Proposed Development. This includes transforming areas of cereal crops, grassland and small areas of mixed scrub and woodland to habitats for the proposed road layout and associated footpaths, cycle paths and verges. This is detailed below in

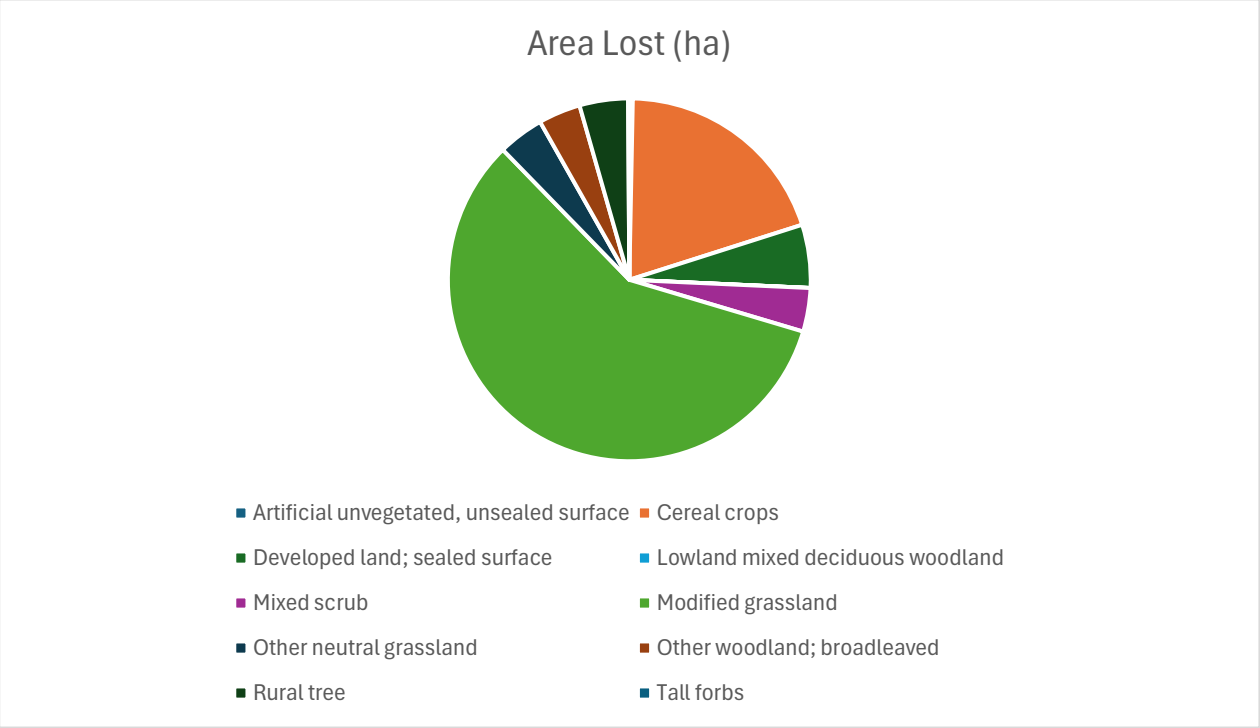
Table 6 summarises the proposed habitat changes (i.e. where habitat is retained, enhanced or lost) as a result of the development. The post development landscape plan in Appendix B illustrates the Site post intervention.

Table 6: Habitat Change Summary

Habitat	Total Area/Length		
	Retained	Enhanced	Lost
Artificial unvegetated, unsealed surface	0.054265		0.078361
Cereal crops	0.083815		5.068248
Developed land; sealed surface	0.259471		1.442616
Lowland mixed deciduous woodland	0.131461		0.000129
Mixed scrub		0.001049	0.9963
Modified grassland		3.047457	14.884643
Other neutral grassland	0.592107		1.049247
Other woodland; broadleaved	0.619389		0.962365
Rural tree	0.1587		1.1075
Tall forbs	0.039904		0.026897
Total Area	**c.1.939 ha**	**c.3.049 ha**	**c. 25.616 ha**
Hedgerows	0.84 km	0 km	0.3 km
Other rivers and streams	0.054 km	0 km	0 km
Ditches	0.084 km	0.57 km	0.48 km
Total Length	**0.978 km**	**0.57 km**	**0.78 km**

Most of the habitat loss is agricultural land, largely pasture and cereal crop followed by woodland and mixed scrub with some other neutral grassland, presented in Image 5. There is a loss of linear habitat, 0.3 km of hedgerow, and 0.48 km of ditches.

Image 5: Habitat area lost (ha)



The total area of habitat lost to the development is 24.51 ha; 0.3 km of hedgerow is also lost. Table 7 summarises the habitat composition of the Site boundary post development and the target condition for each habitat type. For each habitat created the target condition (explaining how this is considered achievable) is shown in Appendix D.

Table 7: Habitat Creation Summary

Proposed Habitat	Total Area or Length	Target Condition	Rationale for Target Condition
Developed land; sealed surface	9.112	N/A - Other	N/A - Other
Embankment seeding	0.8948	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.
Grass swales and Attenuation ponds	3.2345	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.
Hawthorn scrub	0.2054	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.
Meadow rain garden	0.2025	Moderate	A target of moderate condition is considered appropriate for this habitat

Proposed Habitat	Total Area or Length	Target Condition	Rationale for Target Condition
			when associated with a road scheme and likely maintenance regime.
Ornamental rain garden	0.1004	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.
Other neutral grassland	9.8211	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.
Other woodland; broadleaved	0.4478	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.
Other woodland; broadleaved	0.2826	Good	A target of 'good' condition should be endeavoured for all areas of woodland planting within the nature recovery network area.
Rain garden	0.1298	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.
Urban tree	0.8387	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.
Watercourse footprint	0.0457	N/A - Other	N/A - Other
Lowland Mixed Deciduous woodland	0.158 ha	Poor	The intention is to create new parcel of lowland mixed deciduous woodland (LMDW), adjacent to existing LMDW. This approach will likely promote natural regeneration and successful establishment of LMDW. The woodland is expected to take 10 years to establish and reach 'poor' condition, however and ecologically diverse woodland in 'moderate' condition may be achieved through appropriate long-term management for more than 30 years. Habitat management actions include those that: • Manage woodlands according to the UK Forestry

Proposed Habitat	Total Area or Length	Target Condition	Rationale for Target Condition
			Standard (Forestry Commission 2023); • Maintain structural diversity with mature trees and scrub of varying age to provide a wide range of habitats. Ensure continuity of woodland by regeneration or replanting when necessary; • Maintain 'naturalness' of woods where possible, avoiding sudden and drastic modification of woods; • Maintain woodland 'edge habitat' to encourage a wide variety of flora and fauna; • Maintain open spaces such as ridges and clearings to provide sheltered sunny areas. This encourages the growth of flowering plants which provide nectar and pollen for insects. If possible, the open areas should include bare ground and low and high vegetation; • Leave any wet areas such as streams and ponds undisturbed; • Maintain a range of dead wood, particularly for saproxlyic invertebrates, in both shady and sunny situations. This will also encourage fungi which provide food for invertebrates and birds; • Maintain the undisturbed soil structure; and • Allow natural regeneration of woodlands wherever possible.
Total Area	**25.36*** ha	**N/A**	
Species-rich native hedgerow with trees	0.033 km	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.

Proposed Habitat	Total Area or Length	Target Condition	Rationale for Target Condition
Ditches	0.119 km	Moderate	A target of moderate condition is considered appropriate for this habitat when associated with a road scheme and likely maintenance regime.
Total length	**0.152 km**	**N/A**	N/A - Other

*NB: the increase in area from the baseline relates to double counting of tree areas (see methodology for further detail).

Post development, areas of retained habitats will be enhanced. These include retained areas of modified grassland and mixed scrub and lengths of ditch. All retained areas of modified grassland (poor and moderate condition) and scrub (poor condition) will be enhanced. Details of which ditches are to be enhanced are presented in the BNG Statutory Biodiversity Metric calculator. Table 8 summarises the proposed habitat enhancement as part of the development and the target condition for each habitat type. For each habitat enhancement, the target condition (explaining how this is considered achievable) is shown in Appendix D.

Table 8: Habitat Enhancement Summary

Baseline Habitat	Area or length	Baseline Condition	Proposed Habitat	Target condition	Rationale
Modified grassland	1.369 ha	Poor	Other Neutral Grassland	Moderate	When brought under a management regime, it is considered that areas of poor condition modified grassland will be able to be managed to achieve a moderate condition other neutral grassland. This will be through removal of nitrogen inputs, over seeding to increase species diversity as required and changed ongoing management.
Modified grassland	1.677 ha	Moderate	Other Neutral Grassland	Moderate	When brought under a management regime, it is considered that areas of poor condition modified grassland will be able to be managed to achieve a moderate condition other neutral grassland. This will be through removal of nitrogen inputs, over seeding to increase species diversity as

Baseline Habitat	Area or length	Baseline Condition	Proposed Habitat	Target condition	Rationale
					required and changed ongoing management.
Mixed scrub	0.001 ha	Poor	Mixed scrub	Moderate	When brought under a management regime, it is considered that areas of poor condition mixed scrub will be able to be managed to achieve a moderate condition
Total Area	**3.05 ha**	**N/A**			
Ditches	0.57 km	Poor	Ditches	Moderate	When brought under a management regime, it is considered that poor condition ditches will be able to be managed to achieve a moderate condition. In line with Ramboll Recommendations (BNG Report, Ramboll 2025), it is assumed that all ditches to be retained can be improved through the following actions to achieve 'Moderate' condition through design and management: • Maintaining good water quality, with clear water (low turbidity) and no pollution. • Planting a range of emergent, submerged and floating-leaved plants so that there are than 10 species of emergent, floating or submerged plants present in a 20 m ditch length. • Planting a fringe of aquatic marginal vegetation along more than 75% of the ditch. • Maintaining less than 10% cover of filamentous algae and or duckweed

Baseline Habitat	Area or length	Baseline Condition	Proposed Habitat	Target condition	Rationale
					Lemna spp by minimising eutrophication. • Minimising physical damage to less than 5% of the ditch, by preventing damage from damage from machinery use or storage, or any other damaging management activities. • Maintaining sufficient water levels with a minimum summer depth of approximately 0.5 m in minor ditches and 1 m in main drains. This will be informed by the Flood Risk Assessment at detailed design stage. • Ensure that less than 10% of the ditch is heavily shaded. • Ensure that there is an absence of floral and faunal invasive non-native species (INNS).
Total Length	**0.57 km**	**N/A**			

4 Summary

The headline results of the BNG assessment for the Site, using the Statutory Biodiversity Metric calculator are presented below. It should be noted that this assessment only assesses the Phase 1 works, and the outcome of this assessment should be considered holistically with the wider West of Ifield Development, reported in the Ramboll BNG Report (Ramboll 2025).

Overall, there is a gain of 8.58 habitat units, a 6.19% increase in overall biodiversity value of habitat units. There is an initial loss of modified grassland, but despite this large loss, grassland habitat units are responsible for most of the biodiversity unit delivery in the post development plans. This is provided through the enhancement of existing areas of grassland and planting of new areas of other neutral grassland.

To achieve 10% biodiversity net gain, an additional 5.28 habitat units will be required. In the Phase 1 area, trading rules are met with the exception of habitat creation for medium and low distinctiveness habitats (which are considered deliverable within the wider Ifield site or through other approaches). Medium and low distinctiveness units would need to be delivered elsewhere, this could be delivered on the wider Land West of Ifield site or through a registered habitat bank or through the purchase of statutory credits.

N.B. within the Phase 1 scheme a single veteran tree, which is considered an irreplaceable habitat is being removed. Within the metric this cannot be accounted for and therefore will always be considered a loss of biodiversity value.

There is currently an 8.1% loss in hedgerow units due to the removal of hedgerows. It is not possible for the hedgerow units to be recovered within the Site boundary due to a limited availability of area and an aspiration to keep an open nature to the scheme. The loss of hedgerow biodiversity units is expected to be accounted for in the West of Ifield housing development. An additional 2.73 hedgerow units would be required to deliver 10% net gain.

There is currently projected to be a 2.25% loss in watercourse units. An additional 0.72 Water course units would be required to deliver a 10% net gain.

All of these results are presented in Image 6.

Image 6: Habitats, hedges and watercourse units for baseline and post-intervention scenarios and net change

On-site baseline	*Habitat units*	138.60	
	Hedgerow units	15.08	
	Watercourse units	5.86	
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	147.19	
	Hedgerow units	13.86	
	Watercourse units	5.72	
On-site net change (units & percentage)	*Habitat units*	8.58	6.19%
	Hedgerow units	-1.22	-8.10%
	Watercourse units	-0.13	-2.25%

FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	8.58
	Hedgerow units	-1.22
	Watercourse units	-0.13
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	6.19%
	Hedgerow units	-8.10%
	Watercourse units	-2.25%
Trading rules satisfied?		No - Check Trading Summaries ▲

Unacceptable loss of irreplaceable habitat recorded - no bespoke compensation for losses has been agreed ▲

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	138.60	152.46	5.28
Hedgerow units	10.00%	15.08	16.59	2.73
Watercourse units	10.00%	5.86	6.44	0.72

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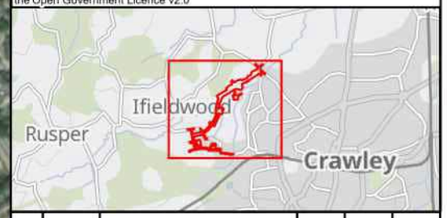
Appendix A: Baseline Habitat Plan

N

Legend

- Red Line Boundary
- Hedgerow (priority habitat)
- Other hedgerows
- Ditches
- Rivers and streams
- Line of trees
- Arable and horticulture
- Other neutral grassland
- Modified grassland
- Mixed scrub
- Sparsely vegetated land
- Developed land, sealed surface
- Artificial unvegetated unsealed surface
- Lowland mixed deciduous woodland
- Other woodland, broadleaved



Rev	Date	Description	Drawn	Check	Approv
01	14/0/25	INITIAL ISSUE	RM	BE	BM

Client:

Homes England

PROJECT:
WEST OF IFIELD

Site
West of Ifield

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Title:

UK Habitats Plan

Designed	B. Ellis	Date: 14 MAY 25	Signed
Drawn	R. Millman	Date: 14 MAY 25	Signed
Checked	B. Ellis	Date: 14 MAY 25	Signed
Approved	B. Murray	Date: 14 MAY 25	Signed
Scale:	1:7,500	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	S2	Project Number:	10051123

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For Information

Drawing Number:
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P01

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Appendix B: Post Intervention Landscape Design