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Appendix 7.12: Biodiversity Net Gain Report

Client

Hallam Land Limited

Project

**Land East of Knowsley Lane,
Knowsley**

Date

August 2025

CONTENTS

1.0 NON-TECHNICAL SUMMARY1

2.0 INTRODUCTION2

3.0 LEGISLATION AND POLICY3

4.0 METHODOLOGY7

5.0 RESULTS9

6.0 PROPOSALS22

7.0 CONCLUSION28

APPENDIX A: BASELINE HABITAT CONDITION ASSESSMENTS30

APPENDIX B: SPECIES LISTS37

FIGURES

- Figure 7.12.1: Baseline Habitats
- Figure 7.12.2: Proposed Habitats
- Figure 7.12.3: Habitat Retention
- Figure 7.12.4: Baseline Habitat Condition and Distinctiveness
- Figure 7.12.5: Proposed Habitat Condition and Distinctiveness

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1.0 NON-TECHNICAL SUMMARY

Report Scope and Methodology
FPCR were commissioned by Hallam Land Management Limited to undertake a Biodiversity Net Gain (BNG) assessment at Land East of Knowsley Lane, Knowsley to provide a baseline biodiversity score for the Site and compare this to proposals. This assessment has been informed by a survey of the habitats present onsite, including condition assessments, undertaken on 8th, 9th and 12th May 2025.
Baseline
The Site is dominated by fields of Modified Grassland but also includes a compartment of cereal crop in the west of the Site. Two parcels of lowland mixed deciduous woodland in the centre of the Site have been classed as ancient woodlands on a precautionary basis, due to the presence of a low number of ancient woodland ground flora species. One parcel of other broadleaved woodland was present in the north-eastern part of the Site. Several parcels of bramble scrub were present, with less frequent areas of hawthorn, blackthorn and mixed scrub. Other habitats include non-priority ponds, bracken, tall forbs, and individual trees. Native hedgerows form field boundaries and include one native hedge with trees. No wet ditches or other watercourse features were identified during the surveys.
Proposals
The proposals for the Site include up to 700 new dwellings with associated access and gardens. Green infrastructure proposals include the retention and enhancement of existing woodland and scrub and creation of additional native mixed scrub, individual trees, species rich grassland and woodland. This will provide a buffer and enhancement to retained woodland habitat. Other habitats include formal and informal amenity grassland areas, a traditional orchard and ornamental planting. The majority of hedgerows will be retained with an appropriate undeveloped buffer; with the exception of small sections lost within H1, H2 H5 and H6 to facilitate access into and across the Site. Compensatory planting will be provided by the provision of a new species-rich native hedgerow targeting moderate condition. Ornamental hedgerows will be provided within the residential compartments.
Conclusion
The Site will result in a 5.11% gain in habitat units and a 20.28% gain in hedgerow units. The proposals fall short of national policy requirements to deliver a 10% gain in habitat units. The proposals will therefore seek to deliver a sufficient quantity of offsite habitat units in order to demonstrate the required BNG. Trading rules have been met within the scheme.

2.0 INTRODUCTION

- 2.1 The following Biodiversity Net Gain (BNG) Report has been prepared by FPCR Environment and Design Ltd on behalf of Hallam Land Management Ltd, to accompany an outline planning application for the redevelopment of Land East of Knowsley Lane, Knowsley, L34 0EB (Central OS Grid Ref: SJ4373 9466) herein referred to as 'the Site'.
- 2.2 This report accompanies and should be read in conjunction with the Ecology Chapter (Chapter 7) of the Environmental Statement (FPCR, 2025) for the Site which has been undertaken to inform the development proposals and to provide recommendations for mitigation and enhancement.

Site Context

- 2.3 The Site is approximately 33.75ha in extent and located on the southern border of Knowsley village. It comprises arable fields, priority habitat deciduous woodland, modified and other neutral grassland, scrub and a number of permanent and temporary waterbodies
- 2.4 The north and western boundaries are native hedgerows. A stone wall forms the southern and eastern boundary.

Site Proposals

- 2.5 Proposals involve an outline application (including details of access to but not within the site) for the erection of up to 700 dwellings together with public open space, landscaping, new vehicular access junctions, active travel links, sustainable urban drainage systems and other associated infrastructure.

Report Scope and Objectives

- 2.6 This Biodiversity Net Gain Report is based on the Chartered Institute of Ecology and Environmental Management (CIEEM) guidance. The scope and objectives of this report are to:
- Summarise the results of the baseline UKHab Survey undertaken on the Site and to present the results of habitat condition assessment surveys following the Defra Statutory Biodiversity Metric Technical Guidance.
 - Provide an overview of outline proposed habitats.
 - Present the results of the Statutory Biodiversity Metric assessment completed for the outline proposals.
 - Demonstrate the capacity for the proposals to demonstrate a net gain in biodiversity through the Statutory biodiversity Metric.
 - Provide recommendations for the proposals to maximise their biodiversity potential.

3.0 LEGISLATION AND POLICY

The Environment Act 2021

- 3.1 In England, biodiversity net gain is required under statutory frameworks introduced by Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021). Under this framework, the majority of planning permission grants will be deemed to have been granted subject to a general biodiversity gain condition. This will require an objective for developments to deliver at least a 10% increase in biodiversity value relative to the pre-development biodiversity value of all on-site habitats.
- 3.2 This is a pre-commencement condition requiring the provision of a Biodiversity Gain Plan to be submitted and approved before works can be commenced, but after planning permission has been granted.
- 3.3 In principle, the grant of planning permission is not within the scope of BNG, however it is important to consider as part of the consenting body's decision-making process how a scheme will be able to demonstrate BNG after permission is granted. Therefore, this biodiversity net gain report presents the results of a Biodiversity Net Gain assessment that has been completed in order to demonstrate how the proposals can be compliant with the requirements of the Environment Act.

Biodiversity Net Gain Hierarchy

- 3.4 The statutory framework allows for the 10% biodiversity gain to be delivered through on-site biodiversity gains, registered off-site biodiversity gains or statutory biodiversity credits. However, as set out in Articles 37A and 37D of the Town and Country Planning (Development Management Procedure) (England) Order 2015, development must consider the biodiversity net gain hierarchy when designing scheme proposals. This sets out hierarchy of actions as follows:
- a) First, for all medium, high and very high distinctiveness habitats, the avoidance of any adverse effects.
 - b) Where these can't be avoided, mitigating any adverse effects on medium, high and very high distinctiveness habitats.
 - c) Then, for all on-site habitats (including low distinctiveness), adverse effects should be compensated by in accordance with the following hierarchy:
 - Prioritising the enhancement of existing habitats; then
 - Creation of on-site habitats;
 - Allocation of registered off-site unit gains; then
 - Purchase of biodiversity credits
- 3.5 Proposals must demonstrate how the biodiversity hierarchy has been applied to or provide the reasons for any deviation. This biodiversity net gain hierarchy is distinct from the mitigation hierarchy set out by CIEEM which is addressed in the accompanying Ecology chapter (Chapter 7) of the Environmental Statement (FPCR 2025) where relevant

National Planning Policy Framework (2024)

- 3.6 The NPPF (2024) seeks to ensure that the planning system contributes to and enhances the natural and local environment, protect and enhance biodiversity and geodiversity by:

"187. d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs;

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

Local Policy

- 3.7 The Knowsley Local Plan Core Strategy will guide development up to 2028. The following policies are relevant to the provision of BNG:

Policy CS8 'Green Infrastructure'

New development should seek to protect, maintain and where possible enhance biodiversity within and around new developments and provide adequate mitigation and/or as a last resort, compensate for green infrastructure or biodiversity loss.

Policy CS19 'Design Quality and Accessibility in New Development'

- 3.8 Clause 1d) relates to promoting biodiversity and clause 3b) regards tackling climate change, by integrating biodiversity in accordance with CS8.

Policy CS21 Greenspaces and Trees: Enhancement of Natural and Semi-Natural Greenspace and Tree Protection

10) The Council will encourage proposals for new development to incorporate:

a) Retention of existing trees, woodland, vegetation and other habitat features which offer a positive contribution to the local environment in terms of visual amenity, recreation value or biodiversity/wildlife interest;

b) Appropriate planting of trees, other soft landscaping and installation of habitat features for the benefit of biodiversity; and

c) Adequate replacement provision where tree loss is unavoidable, comprising two additional trees for every tree lost and taking account of species and size.

The Liverpool City Region (LCR) Combined Authority Spatial Development Strategy

- 3.9 The developing LCR Combined Authority Spatial Development Strategy will prioritise and identify opportunities for Green Infrastructure, habitat provision and BNG which will be in line with the Local Nature Recovery Strategy (LNRS). When finalised, it will form part of the 'Development Plan' for the city region along with Local Plans and Neighbourhood Plan

- 3.10 The draft Liverpool City Region Spatial Development Strategy contains Policy LCR DP7-'The Natural Environment and Nature Recovery'

development plans and proposals should plan positively for the LCR's natural environment by:

- *Following the mitigation hierarchy.*
- *Targeting the location of appropriate mitigation using a sequential approach with the following order of priorities:*
 - I. *the development site;*
 - II. *the immediate locality and/or within the LCR Ecological Network and/or Nature Improvement Area;*
 - III. *locations that fall within the LCR Ecological Network and/or Nature Improvement Area and within the local authority area;*
 - IV. *locations that fall within the LCR Ecological Network and/or Nature Improvement Area within the city region; and*
 - V. *other ecologically appropriate locations within the city region.*
- *Securing a minimum 10% BNG requirement and achieving more than 10% on the development site, or where not possible, off-site following the sequential approach.*
- *Encouraging and supporting proposals that would achieve greater than 10% BNG.*

Mandatory Biodiversity Net Gain Minimum Reporting Requirements

- 3.11 The Government's BNG Planning Practice Guidance (PPG)¹ sets out the minimum requirements of any planning application subject to mandatory BNG to present as part of any submission in order to validate the application. For ease of reference, the minimum information required has been set out in Table 1 below.
- 3.12 Additional detail and information appropriate to the application is provided within this report in order to assist Knowsley Council in their decision-making process and to provide confidence that the scheme will be able to demonstrate a mandatory BNG through the provision of a Biodiversity Gain Plan following receipt of planning permission, in accordance with the PPG.

¹ Gov.uk (2024), Biodiversity Net Gain. Available at: Biodiversity net gain - GOV.UK

Table 1: Checklist of Minimum BNG Reporting Requirements for Planning Application Validation

Minimum Requirements in BNG PPG	Statement of Relevance to the Site
<i>Confirmation that the Site is believed to be subject to the mandatory BNG condition.</i>	The Site does not meet any of the exemption criteria and so it is understood that the site will be subject to the mandatory BNG condition.
<i>The pre-development biodiversity value of the Site, either on the data of application or an earlier proposed date (as appropriate).</i>	The accompanying Statutory Metric completed for the scheme provides the pre-development biodiversity value of the Site. The values are also presented within this report.
<i>Where an earlier date is proposed, provide the reasons for proposing that date.</i>	The 'relevant date' is proposed to be the latest date that a Site survey was completed during which observations were made to check if any significant changes in habitats had occurred. For the Site, this will be 12 May 2025. This is considered to be an appropriate date as it is within the date that ecological data is considered valid (two years, as recommended by CIEEM).
<i>The completed metric calculation showing the calculations of the pre-development biodiversity value of the on-site habitat on the data of application (or proposed earlier date) including the publication date of the biodiversity metric used.</i>	The Statutory Biodiversity Metric, published in August 2024, was used to calculate the pre-development value of the Site. The completed metric has been provided alongside this BNG report.
<i>A statement whether activities have been carried out prior to the date of application (or proposed date), that result in loss of on-site biodiversity value (degradation).</i>	This statement confirms that FPCR and Hallam Land Limited are not aware of any habitat degradation on-site.
<i>A description of any irreplaceable habitat (as set out in column 1 of the Schedule to the Biodiversity gain Requirements (Irreplaceable Habitat) Regulations 2024) on the Site, that exists on the date of application (or an earlier proposed date)</i>	The surveys identified a low number of ancient woodland indicator ground flora species within W-1 and W-2. With ancient woodland in England being defined as an area that has been continuously wooded since at least 1600 AD, and due to the proximity of the woodlands to an historic estate which dates to the late 15th century, the recorded woodland has been assumed to be ancient for the purpose of assessment to take a robust and precautionary approach.
<i>Plan(s), drawn to an identified scale and showing the direction of North, showing on-site habitat existing on the date of application (or earlier proposed date) including any irreplaceable habitat (if applicable).</i>	Figure 7.12.1 shows the baseline habitats present on-site on the proposed relevant date (12 May 2025). This includes the minimum requirement to show an identified scale and north arrow. The plan also identifies the location and extent of W-1 and W-2 which were classified as irreplaceable habitat onsite.

4.0 METHODOLOGY

Baseline Habitat Assessment

- 4.1 A baseline habitat survey was completed broadly following the UK Habitat Classification System and the Statutory Biodiversity Metric Condition Assessment Criteria. This involved a systematic walkover of the Site to map all habitats present for the purposes of completing the Statutory Biodiversity metric Calculation Tool and their current condition.
- 4.2 An initial habitat survey was conducted on the 8th and 9th May 2025. Survey methods broadly followed the UK Habitat Classification System² (UKHab) to map habitats present onsite. This involved a systematic walk over of the Site to classify the broad habitat types which were broadly mapped in the field using Qfield.
- 4.3 Habitat condition assessment surveys were completed on 8th and 9th May in accordance with the Statutory Biodiversity Metric Habitat Condition Assessments. The baseline surveys were supplemented by a further survey undertaken on 12th May 2025 to collect detailed botanical information to inform the condition assessments of onsite woodlands, Howards Pit and Knowles Pit.
- 4.4 The summary results of the habitat condition assessment survey results are presented in this report.
- 4.5 Further details of the survey methodologies employed to assess the ecological baseline for the Site are provided in the accompanying Ecology chapter (Chapter 7) of the Environmental Statement (FPCR, 2025).

Biodiversity Net Gain Calculation

- 4.6 Defra's Statutory Biodiversity Metric calculation tool was used to inform this BNG Report. It is an MS Excel spreadsheet that is used to quantify the predicted net-change in biodiversity value ("biodiversity units") of a proposed development site before and after development. It treats the area-based habitats and linear features such as hedgerows and lines of trees separately, and is based on pre-determined values, along with published written guidance set by a Natural England-led team of experts.
- 4.7 The development Site was surveyed and mapped, as described above. The survey results were digitised using QGIS, with the existing habitats identified and areas automatically generated.
- 4.8 Onsite post-development habitats were determined from the latest Illustrative Landscape Masterplan by Pegasus Group (DWG P21-3399_EN-1002 Rev E) with proposed habitats mapped and digitised using QGIS to generate areas for each of the habitats proposed for enhancement.
- 4.9 These pre- and post-enhancement habitat areas were then inputted into the Statutory Biodiversity Metric Calculation tool. The metric automatically assigns habitat distinctiveness score for each of the baseline and proposed habitats.
- 4.10 The metric then assigns a range of pre-assigned factors to each of the proposed habitats. These have been advised by subject knowledge experts and are universal multipliers generated by the metric itself for the following variables relevant to habitat creation, enhancement or restoration proposals:

² Butcher, B., Edmonds, B., Norton, L., & Treweek, J. (n.d.). The UK Habitats Classification System V2. UKHab. Retrieved July 26, 2024, from <https://ukhab.org/>

- difficulty of creating or restoring/enhancing a habitat: This pre-assigned score is based on how difficult a particular habitat type is to create or restore/enhance
- temporal risk: this is the 'time to target condition' for any particular habitat and determines how long a particular habitat type is likely to take to reach the condition score that the desired condition score assigned to it.
- spatial risk: this score is based on the distance between the site of habitat loss and any habitats creation or enhancement proposals at any off-site offsetting solutions.

4.11 The strategic significance multiplier within the metric has been informed by a desk study review. Full details of the desktop study undertaken are provided in the accompanying Ecology chapter (Chapter 7) of the Environmental Statement.

4.12 Full details of the calculation methodology are provided in The Statutory Biodiversity Metric User Guide.

Limitations

4.13 The UKHab habitat baseline map has been reproduced from detailed field notes and informed by aerial imagery, OS mapping and site maps provided by the client. The accuracy of this figure is therefore ultimately guided by the accuracy of these sources and can only be relied upon to a certain degree of resolution.

4.14 Natural ecological communities are susceptible to change; at times this change can be rapid as a result of internal and external environmental factors. The biodiversity offsetting calculations are based on ecological assessments of habitats carried out during 2025; as a result, changes which may affect the conclusions of this report may occur, if a prolonged period of time elapses prior to the commencement of the project.

4.15 No further limitations specific to this report influenced this assessment.

5.0 RESULTS

Strategic Significance

- 5.1 The Liverpool City Region and Lancashire LNRS is currently in development and will provide a framework for meaningful, ecologically robust habitat delivery through BNG. In the absence of Local Nature Recovery Network Strategies, national and local guidance has been consulted to assign strategic significance. This has included the MEAS Guidance note on Biodiversity Net Gain in the Liverpool City Region, the LCR Ecological Network Explorer Map and the Statutory Biodiversity Metric User Guide.
- 5.2 Within the Knowsley district, habitats within or identified by the following areas/plans are considered to be of high strategic significance within the metric:
- Statutory protected sites (e.g. SAC, SPA, Ramsar and SSSI, NNR and LNR);
 - Locally designated sites, including Local Wildlife Sites (LWS), Sites of Biological Importance (SBI);
 - Local Nature Recovery Strategy (when published);
 - Liverpool City Region Ecological Network Nature Improvement Areas and Core Biodiversity Areas;
 - North Merseyside Biodiversity Action Plan Habitats (with the exception of Urban Green Infrastructure and Urban Grasslands that are classified as modified grassland);
 - Knowsley Strategic Green Links (as defined in policy CS8 of the Knowsley Local Plan Core Strategy).
- 5.3 As demonstrated in the accompanying metric, the following habitat interventions have been awarded a high strategic significance. In line with the Statutory metric guidance these areas will be recorded as low strategic significance in the baseline and high strategic significance in the post intervention habitats:
- North Merseyside Biodiversity Action Plan Habitats
 - o Lowland Mixed Deciduous woodland
 - o Urban trees
 - o Native hedgerows
- 5.4 All other habitats have been assigned a low strategic significance.

Biodiversity Units

Habitats

- 5.5 A summary description and baseline conditions of the baseline habitats is provided in Table 2 below and an illustration is provided in Figure 7.12.1 and Figure 7.12.4.
- 5.6 Full survey results, baseline condition assessment scores and baseline unit scores are provided in Appendix A. Botanical species lists can be found in Appendix B.

Table 2: Baseline Habitats

Ref	Habitat type	Condition	Description	Photo
Area based Habitats				
Very Low Distinctiveness				
N/A	Artificial unvegetated, unsealed surface	N/A - Poor	Aggregate access track.	 Photograph 1: Access track
Low Distinctiveness				
C-1	Cereal crops	N/A - Poor	Western field sown with barley. With narrow (<1m wide) grassland margins. Field margins were not representative of priority or local BAP habitat. Species noted within the margins include frequent cock's-foot, creeping thistle and barren brome, other species were noted as occasional or rare and included false oat-grass, cow parsley, common hogweed, ground elder, nettle and bracken. No condition assessment is required for this habitat – it is automatically assigned a 'poor' condition.	 Photograph 2: C-1

Ref	Habitat type	Condition	Description	Photo
G-1,	Modified grassland	Poor	The majority of the Site comprises fields of species poor modified grassland managed for silage. Within the three northern fields, the sward is mostly comprised of palatable grasses including abundant perennial rye-grass, Yorkshire fog, meadow foxtail and soft-brome. Cock's-foot was also noted rarely. Creeping buttercup and creeping thistle were locally frequent. Other forbs present at an occasional to rare abundance include white clover, cow parsley, common ragwort, common mouse-ear, meadow buttercup and broad-leaved dock. The grassland was assessed as being in 'poor' condition as it failed essential criterion 1 - on average it contained 3 species and 1 forb per m². It also had a high proportion of bare ground (32.5%) and lack of variation in sward height.	 Photograph 3: G-1
G-2	Modified grassland	Moderate	One field in the south of the site has been left fallow and scattered scrub is beginning to develop, becoming denser towards the northeast and southwest of the parcel (see S-2 for description). Species within the sward were similar to G-1 but this field contains a higher species diversity (6sp per m²) and a greater number of forbs (4sp per m²) than G-1. Conditions are locally damper in small areas with soft rush and creeping thistle noted as locally frequent in damper locations. Creeping buttercup and perennial rye-grass were abundant locally, with rosebay willowherb locally frequent and Yorkshire-fog and cock's-foot frequent. Occasionally and rarely noted species included cat's ear, common vetch, common sedge. Fleabane, cuckooflower and red clover. Although a number of these species are indicative of neutral grassland, their relative frequency and the overall community composition particularly the dominance of perennial rye-grass led to the classification of modified grassland.	 Photograph 4: G-2

Ref	Habitat type	Condition	Description	Photo
			This parcel was assessed as moderate condition as it achieved an average 6 species per m ² , passing five criteria in total, relating to lack of physical damage, bare ground, cover of bracken and presence of INNS.	
B-1, B-2	Bracken	N/A - Poor	Areas dominated by dense stands of bracken, underlain by moss sp. with abundant common nettle, and bramble and raspberry noted occasionally. Located to the east of W-1 and H-5. No condition assessment is required for this habitat – it is automatically assigned a 'poor' condition.	 Photograph 5: Bracken east of W-1
R-1	Tall forbs	Moderate	Area to the east of H-5 which is dominated by nettle and cleavers, with locally abundant great willowherb and locally frequent cow parsley. Creeping buttercup was also noted as frequent. Other species were noted as occasional or rare and include broad-leaved dock, ragwort, bramble and elder and willow seedlings. This habitat was assessed as 'moderate condition as it passed 2 of 3 criteria. The habitat is free of INNS and contains different plant species which provide nectar for wildlife.	 Photograph 6: Tall Forbs east of H-5

Ref	Habitat type	Condition	Description	Photo
Medium distinctiveness				
W-3	Other woodland, broadleaved	Poor	An approx. 15m wide strip of broadleaved woodland at the northern Site extent and adjacent to residential gardens to the north. The canopy comprises Ash with frequent Sycamore within the canopy and understorey. Other species within the shrub layer were noted as occasional or rare and include hawthorn, pedunculate oak, holly elder and lime. The ground flora comprises abundant nettle, bramble, common ivy and hybrid bluebell. There are paths through the woodland, leading to the adjacent residential area and piles of brash, garden prunings and litter were noted W-3 was assessed as 'poor' condition, scoring poorly on the diversity and cover of native species, tree health, ground flora and lack of veteran trees.	 Photograph 7: W-3  Photograph 8: W-3 Interior

Ref	Habitat type	Condition	Description	Photo
S-1	Bramble scrub	N/A - Poor	The majority of scrub on Site comprises areas dominated by bramble. With the exception of locally frequent raspberry, cleavers and common nettle, other species were noted as occasional or rare and include creeping thistle, cow parsley, rosebay willowherb and seedling oak and elder. Soft brome was noted at the edges. No condition assessment is required for this habitat – it is automatically assigned a 'poor' condition.	 Photograph 9: S-1
S-2	Mixed scrub	Moderate	Within the grassland south of W-1 and W-2 a willow and blackthorn scrub is beginning to develop, becoming denser towards the north and west of the parcel. Scrub species comprise young self-set willow sp, blackthorn, and rarely noted pedunculate oak and silver birch. S-2 was assessed as 'moderate' condition, failing only one criterion relating to the scrub containing young shrubs.	 Photograph 10: S-2

Ref	Habitat type	Condition	Description	Photo
S-3	Blackthorn scrub	Poor	Along the northern boundary of the central grass field, along the south of Hedge 2 is an area of blackthorn dominant scrub with an understorey of common nettle and common bramble. S-4 was assessed as 'poor' condition, due to a lack of mature shrubs and a lack of clearings or a well-developed edge.	 Photograph 11: S-3
S-4	Hawthorn scrub	Poor	A further small area south of H2, where a young hawthorn dominant scrub is developing. Bramble and nettle were also noted as locally frequent. S-4 was assessed as 'poor' condition, due to a low number of woody species present and a lack of older shrubs and clearings.	 Photograph 12: S-4

Ref	Habitat type	Condition	Description	Photo
S-5	Mixed scrub	Moderate	Also to the south of W-2, similar species composition to S-2, however, this parcel contained a greater age range of woody species. S-5 was assessed as 'moderate' condition, failing only one criterion relating to the presence of clearings, glades or rides.	 Photograph 13: S-5
P-1 P-4 P-5 P-7 P-8	Ponds (non-priority)	Moderate/ poor	At the time of the UKHab survey, five ponds were noted within the Site. All are woodland ponds and located within the central W-1 and W-2. Three further areas within W-1 appear to be seasonally inundated but were dry at the time of the UKHab survey and also during part or all of the GCN surveys. These were therefore not classed as ponds for the purposes of this assessment. Aquatic vegetation was limited to frog-bit within one pond (P-4). Marginals were present in P-1, P-4 and P-5 only. Yellow iris, hemlock water-dropwort and soft rush were noted within the margins and banks. The Invasive non-native (INNS) rhododendron was noted at all ponds and was often the dominant bankside vegetation, shading out most other species. Additionally, terrapin and large fish were noted within P-4 during the suite of pond surveys undertaken at the Site. All ponds failed condition 1 due to high turbidity. All ponds also failed condition 6 due to presence of INNS. P-1 and P-4 failed additional conditions relating to surrounding habitat (P-4 is close to the arable field), presence of algae (P-1) and fish (P-4). P1 and P-4 were therefore assessed as 'poor' condition and P-5, P-7 and P-8 were assessed as 'moderate' condition.	 Photograph 14: P-1  Photograph 15: P-4

Ref	Habitat type	Condition	Description	Photo
				 Photograph 16: P-7
T-2, T-3, T-4 T-5 T-7 T-8 T-11 T=12 T-14a T- 14b, T-14c.	Individual trees	Poor/ Moderate/ Good	Eleven trees in total were noted as individuals. These comprise: • One small non-native tree in poor condition (T-7); • Four small non-native trees in Moderate condition (T-2, T-3, T-4, T-5); • Four small native trees in moderate condition (T-12, T14a, T-14b T-14c); • One small native tree in good condition (T-8); and • One medium non-native tree in moderate condition (T-11). Species were mostly sycamore, with some goat willow and ash.	 Photograph 17: T-2

Ref	Habitat type	Condition	Description	Photo
High distinctiveness				
W-1	Lowland mixed deciduous woodland	Poor	Knowles pit, is the western of two woodland parcels located centrally within the Site. Sycamore was abundant amongst the canopy with pedunculate oak and crack willow as locally frequent associates. An established understorey is present, comprising frequent hazel, dogwood and the invasive non-native species <i>Rhododendron</i>. Other species were noted as a rare or occasional occurrence including downy birch, alder, rowan and grey willow. The ground flora would be broadly characterised as NVC community W10-<i>Quercus robur</i> - <i>Pteridium aquilinum</i> - <i>Rubus fruticosus</i> woodland with locally frequent common ivy and other species occurring at a rare abundance including the ancient woodland indicator species: remote sedge, native daffodil, English bluebell and scaly male fern. Localised areas in the centre of the wood align more closely towards NVC community W6 <i>Alnus glutinosa</i> - <i>Urtica dioica</i> woodland. In these areas there was a greater abundance of species indicative of damp conditions including alder, crack-willow, grey willow and goat willow. Yellow iris and remote sedge occurred frequently in localised areas. Other species were recorded as occasional or rare including wood dock, bittersweet, creeping buttercup, bluebell and wild angelica. The ancient woodland indicator species remote sedge was noted at an occasional to frequent abundance. Several ponds were present within the woodland and a network of informal paths run throughout linking the more permanent ponds. W-1 was assessed as 'poor' condition, scoring poorly for presence of INNS, diversity and cover of native species and presence of veteran trees. Due to the presence of four ground flora species which may be found within ancient woodland, this habitat has been classified as ancient woodland irreplaceable habitat on a precautionary basis.	 Photograph 18: W-1  Photograph 19: W-1

Ref	Habitat type	Condition	Description	Photo
W-2	Lowland mixed deciduous woodland	Poor	Howards pit, is the eastern parcel of the two woodlands located centrally within the Site. Canopy species were similar to W-1, broadly in line with NVC community W10-<i>Quercus robur</i> - <i>Pteridium aquilinum</i> - <i>Rubus fruticosus</i> woodland. Sycamore was frequent to abundant throughout, the canopy with pedunculate oak as a frequent associate. The understorey is dominated by the invasive non-native rhododendron with other species noted only rarely including hawthorn, hazel, holly, hybrid black-poplar and blackthorn. The stands of <i>Rhododendron</i> are dense and the ground flora is mostly absent beneath. However, some open glades are present where the ground flora is more established. English bluebell, creeping soft grass and remote sedge were noted as occasional. W-2 was assessed as 'poor' condition, scoring poorly for presence of INNS, diversity and cover of native species lack of ground flora and presence of veteran trees. Due to the presence of native bluebell and remote sedge which may be found within ancient woodland ground flora. On a precautionary basis, this habitat has been classified as ancient woodland irreplaceable habitat.	 Photograph 20: W-2  Photograph 21: W-2

Ref	Habitat type	Condition	Description	Photo
Linear Habitats				
Low distinctiveness				
H-1, H-2, H-3, H-4, H-5, H-7, H-8	Native hedgerow	Moderate/ Good	All are hawthorn dominant hedgerows, supporting an average of three or less species per 30m section. Sycamore, ash, elder, hazel, horse chestnut, wild cherry and blackthorn were also noted as rare to frequent occurrences. H-2 also contained a number of non-native introductions including cherry laurel, willow leaved cotoneaster rosa sp. and Russian vine. H-1 contains a mature standard Pedunculate Oak. None of the hedgerows are likely to be considered 'Important' under the ecology sections of Hedgerow Regulations 1997. However, all hedges support >80% native species (primarily hawthorn) and therefore qualify as a Habitat of Principal Importance under NERC Act 2006. Despite this status, hedgerows are a common habitat type both nationally and locally and given hedgerows on site are not particularly notable examples. H-1 was assessed as moderate condition as it failed both attributes in the functional group relating to height and width. All other hedges were assessed as good condition, only failing 1 attribute regarding the presence of nutrient enriched vegetation.	 Photograph 22: H-3  Photograph 23: H-5

Ref	Habitat type	Condition	Description	Photo
Medium distinctiveness				
H-6,	Native hedgerow with trees	Good	H-6 is a tall and unmanaged overgrown hedgerow, south of W-2, species noted were hawthorn, pedunculate oak, elder goat willow and horse chestnut. Three standard goat willow trees are present. H-6 is not likely to be considered 'Important' under the ecology sections of Hedgerow Regulations 1997 as it averaged 4 woody species per 30m and did not have four associated features. However, as it supports >80% native species, it would qualify as a Habitat of Principal Importance under NERC Act 2006. Assessed as good condition – H-6 passed all criteria except those relating to the presence of nutrient rich vegetation and presence of more than one age class of tree.	 Photograph 24: H-6

6.0 PROPOSALS

6.1 At this outline design stage, planting plans and detailed habitat creation and ongoing management measures have not yet been fixed. Therefore, a number of assumptions regarding proposed habitat types and condition have been made during this assessment. Individual habitat type and condition targets are outlined within this section and have been informed by the Illustrative Landscape Masterplan (DWG P21-3399_EN-1002 Rev E) (Pegasus 2025) and ecological professional judgement.

6.2 Proposed habitats are shown on Figure 7.12.2, while proposed habitat retention, enhancement and creation is shown on Figure 7.12.5. The proposals are summarised below, with broad creation, enhancement and management methods outlined in Table 3 and Table 4, as subject to detailed design.

Irreplaceable Habitats

6.3 Woodland on Site is not mapped as ancient woodland within the inventory layer on MAGIC map. However, the detailed botanical survey identified a low number of ancient woodland indicator ground flora species within W-1 and W-2. With ancient woodland in England being defined as an area that has been continuously wooded since at least 1600 AD, and due to the proximity of the woodlands to an historic estate which dates to the late 15th century, the recorded woodland has been assumed to be ancient woodland irreplaceable habitat for the purpose of assessment to take a robust and precautionary approach.

6.4 There will be no losses of irreplaceable habitat within outline proposals. All existing Lowland Mixed Deciduous Woodland on Site will be retained, enhanced and buffered from impacts. Details of outline methods for enhancement and management of Lowland Mixed Deciduous Woodland W-1 and W-2 are shown in Table 3.

6.5 No other irreplaceable habitat was identified during the surveys.

Habitats

Habitat Retention

6.6 Habitats proposed for retention include:

- Areas of mixed scrub S-2 and S-5 in moderate condition.
- Non priority ponds P-5, P-7 and P-8 in moderate condition and P-1 and P-4 in poor condition.

Habitat Enhancement

6.7 Proposed habitat enhancement includes:

- Enhancement of retained woodlands W-1, W-2 and W-3 from poor to moderate condition.
- Enhancement of retained bramble scrub, blackthorn scrub and hawthorn scrub in poor condition, to mixed native scrub in moderate condition.

Habitat Creation

6.8 Proposed habitat creation includes:

- Creation of modified grassland in good condition within the centre of the Site.

- Creation of other neutral grassland in moderate condition around the peripheries of the Site and within SUDs areas.
- Planting of mixed native scrub in moderate condition within appropriate locations adjacent to areas of retained onsite and offsite woodland and scrub.
- Planting of other native broadleaved woodland in moderate condition within appropriate locations adjacent to areas of retained offsite woodland.
- Creation of a community traditional orchard in moderate condition.
- Planting of 193 individual trees in moderate condition, and 9 pleached trees in poor condition.

6.9 Planned areas of developed land, gardens, ornamental planting, and hardstanding footpaths/cycleways/ play areas are not included within Table 3, below as they will not be managed for biodiversity.

Table 3: Outline Habitat Creation, Enhancement and Management Proposals

Ref	Habitat	Description	Condition/ Distinctiveness
MG	Modified Grassland - created	Amenity/mown grassland areas will be created using a flowering lawn seed mix and will be managed on an informal basis to encourage a more diverse sward throughout. Where any excessive areas of bare ground establish or signs of damage are observed, reseeding will be undertaken.	Good / Low
ONG	Other Neutral Grassland - created	Within open greenspace - rough grassland/ species rich meadow /and Wetland SUDs species rich meadow areas will be seeded with an appropriate species rich seed mix of local provenance and targeting an average of at least 10 species per m². Management will ensure the sward has a consistently high proportion of characteristic indicator species, moderate species diversity and varied sward structure. This involves: 1. Annual mowing after flowering (late summer or early autumn) and removing cuttings to reduce nutrient input. 2. Mowing height should vary to maintain structural diversity, with uncut patches preserved on rotation. 3. Targeted removal of undesirable species like creeping thistle. 4. Periodic cutting will control scrub while maintaining habitat diversity. 5. Contractors should avoid heavy machinery when wet to prevent soil compaction. Adaptive management will tackle declines in species diversity through overseeding or plug planting as needed.	Moderate / Medium

S1/S 3/S4 /MS	Mixed Native Scrub. - enhanced and created.	Additional planting using a mixture of at least 5 appropriate native woody species will be undertaken, to diversify the woody component of the community of retained scrub and increase the extent of Mixed native scrub. Management of retained and newly created scrub via: 1. Selective thinning / coppicing to promote regeneration of seedlings and saplings and increase structural diversity. A target of 15-25% open space will be targeted and maintained within the habitat 2. Trimming of the scrub edges to aid development of a graded margin down to field layer (tapering edge from canopy height to 20cm). Trimming to take place outside of bird nesting season (March to August/early September) during winter months. Grassland glades to be managed as ONG habitat above. Adaptive management will include replanting native species or creating new scrub patches if diversity declines or gaps emerge.	Moderate / Medium
W1 and W2	Lowland Mixed Deciduous Woodland – enhanced	The woodland will be brought into favourable management to retain and enhance its existing value. An increase in condition can be achieved specifically by: 1. Undertaking a programme of removal of non-native invasive Rhododendron. The woodland will be monitored and corrective measures undertaken if re-recorded. It has been assumed within the condition assessment that some rhododendron may still remain due to the difficulty in fully eradicating this species, particularly as it is present within the wider area and likely to re-colonise. 2. Selective felling and coppicing to encourage natural regeneration of gaps, diversify the structure of the woodland and allow ground flora to re-establish. 3. Restricting recreational use to dedicated formal footpaths to reduce impacts. Use of brash from coppicing to clearly demarcate footpaths and encourage users to stick to the footpaths. These measures will be incorporated into a recreational management plan. 4. Manage any mature trees with ash dieback or standing deadwood, to ensure public safety and reduce transmission of dieback. Management to diversify deadwood habitat and encourage regeneration of replacement canopy trees. 5. Deadwood from native trees from coppicing and thinning should be left in-situ, both as standing and lying deadwood. Adaptive management may include enrichment planting with native species or creating additional light gaps if woodland structure becomes too closed.	Moderate / High
W3	Other woodland,	The woodland will be brought into favourable management to enhance condition. This can be achieved by:	Moderate / Meduim

	broadleaved - enhanced	1. Selective felling and coppicing to encourage natural regeneration of gaps, diversify the structure of the woodland and allow ground flora to re-establish. 2. Manage the mature ash trees with ash dieback to ensure public safety, diversify deadwood habitat and encourage regeneration of replacement canopy trees. 3. Deadwood from native trees from coppicing and thinning should be left in-situ, both as standing and lying deadwood. Adaptive management may include enrichment planting with native species or creating additional light gaps if woodland structure becomes too closed.	
W4	Other woodland, broadleaved - created	The following criteria in bold are targeted with allowance for minor variance. Habitat creation and management are targeting moderate condition: 1. This should be an area of trees with complete canopy cover. 2. Native species are dominant. Non-native species account for less than 20% of the vegetation cover. 3. A diverse age and height structure of trees. 4. Free from damage from stock or wild mammals. 5. There should be evidence of successful tree regeneration such as seedlings, saplings and young trees. 6. Standing and fallen dead wood are present including fallen large dead branches/stems and stumps. 8. The area is protected from damage. 9. There should be no evidence of inappropriate management (e.g. deep ruts or compaction). 10. Invasive non-native plants are absent. 11. No signs of significant nutrient enrichment present. 12. More than 5 different native trees and or shrub species in an average 10 m radius.	Moderate / Medium
P-5 P-7, P-8	Ponds (non- priority) - retained	To retain P-5, P-7 and P-8 in moderate condition, management will focus on improving water quality, and maintaining habitat features that support aquatic and marginal wildlife. 1. Use of fertilizer will be avoided within areas that may run-off into ponds. 2. Management will involve periodic removal of excessive silt and decaying vegetation every 10-15 years to maintain water depth and quality, avoiding major disturbances during amphibian breeding season (spring and summer). 3. Water quality will be monitored, focusing on nutrient levels and evidence of algal blooms. Measures to address excessive algae may include planting native aquatic species to compete with algal growth, manual removal, use of	Moderate / Meduim

		barley straw and increasing the frequency of management as described in 2. above. 4. Contractors will avoid using heavy machinery around pond edges to minimise soil compaction and sediment runoff. Adaptive management may include planting native aquatic species to enhance diversity, removal of scrub to ensure the pond is not overshadowed or creating shallow scrapes for additional habitat complexity if the pond becomes overly shaded or silted. It is assumed P-1 and P-4 will maintain their current poor condition.	
TO	Traditional Orchard	This area will be developed by establishing grassland and planting native fruit trees appropriate for the site, including varieties with local provenance whenever feasible. To manage in moderate condition, the management will focus on maintaining diverse fruit trees, a mosaic of grassland habitats beneath the canopy, and monitoring to control damage. 1. Management will involve pruning trees every 3-5 years to maintain tree health and promote fruit production, while retaining standing deadwood where safe. 2. Grass beneath the trees will be managed as for ONG above. 3. Invasive species will be controlled manually or with targeted herbicides. 4. Around the base of trees, vegetation should be kept cut low or removed to reduce competition. 5. Fallen fruit should be partially left to support invertebrates and birds, but excessive buildup will be avoided to prevent nutrient enrichment. Adaptive management may include planting new fruit trees of local varieties to replace ageing specimens and enhancing ground flora diversity through overseeding if necessary.	Moderate / High
T-A	Individual trees - created	193 native and non-native ornamental trees will be planted across the site. Management will focus on maintaining tree health, structural integrity, and ecological value. 1. Management will involve routine inspection every 2-3 years to assess tree health, structural stability, and signs of disease or pest infestation. 2. Pruning will be carried out as needed to remove dead, diseased, or damaged branches while maintaining a natural shape and avoiding excessive canopy reduction. 3. Mulching around the base will help retain moisture, suppress weeds, and improve soil health, with mulch refreshed annually.	Moderate / Medium

		4. Soil compaction around the root zone will be minimised by avoiding heavy machinery use and protecting the root area during nearby construction or landscaping activities. 5. Watering during prolonged dry periods will help maintain tree vitality, especially for young or newly planted specimens. 6. Any invasive or competitive ground flora around the base will be manually removed to reduce competition. 7. Deadwood, where safe, should be retained to enhance biodiversity. Adaptive management may include additional planting or replacement if tree health significantly declines or if structural failures occur.	
T-B	Individual trees - created	Planting of 9 ornamental trees within the central POS. A poor condition is targeted as trees will be pleached.	Poor / Medium

Hedgerows

Hedgerow Retention

6.10 Hedgerows to be retained include:

- H-1 with the exception of three small sections totalling 29m removed to facilitate access and visibility.
- H-2 with the exception of three small sections totalling 18m removed to create pedestrian access.
- H-3, H-4 and H-7 in entirety.
- H-5 with the exception of a 19m loss to widen access.
- Partial retention of 36m of H-6 with a loss of 18m to facilitate a proposed internal road.

Hedgerow Creation

6.11 Proposed hedgerow creation includes an additional 25m of species-rich native hedgerow and 29m of non-native ornamental hedgerow.

Table 4: Outline Hedgerow Creation and Management Proposals

Ref	Habitat	Description	Condition/ Distinctiveness
H9	Ornamental Hedgerow	Proposed ornamental hedgerow adjacent to residential parcels.	Poor / V.Low
H10	Species-rich Native Hedgerow	Proposed along the western and northern boundary, this hedge will be planted with a minimum of 5 native species and managed in the long-term through rotational cutting to encourage the establishment of bushy hedgerows. The hedgerow is to be created within a GI corridor that will encourage the	Moderate / Medium

		establishment on an undisturbed margin that will be sown with a native wildflower seed mix.	
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7.0 CONCLUSION

- 7.1 The habitat retention, enhancement and creation proposals highlighted within this report have all been inputted into the Statutory Biodiversity Metric. Table 5 provides a summary of the headline results of the assessment completed for the proposals

Table 5: Statutory Biodiversity Metric Headline Results

On-site baseline	Arable habitat units	93.54	
	Hedgerow units	2.84	
	Watercourse units	0.00	
On-site post-intervention (including habitat retention, creation & enhancement)	Arable habitat units	98.33	
	Hedgerow units	9.43	
	Watercourse units	0.00	
On-site net change (units & percentage)	Arable habitat units	4.79	5.11%
	Hedgerow units	6.59	20.28%
	Watercourse units	0.00	0.00%

- 7.2 The Statutory Metric has demonstrated that the scheme delivers a 5.11% gain in habitat units and gain of 20.28% in hedgerow units. To achieve a net gain of 10%, the proposed development will require an additional 4.57 habitat units. Securing offsite units, or the purchasing of statutory credits will therefore be necessary to deliver the habitat unit shortfall.

Habitat Trading Rules

- 7.3 Trading rules have been met within the proposed scheme.

Biodiversity Net Gain Hierarchy

- 7.4 The Biodiversity Net Gain hierarchy is provided within the Government's PPG and sets out guidance on how to prioritise habitat avoidance, retention and compensation for more valuable habitats. The BNG Hierarchy has influenced the Site design through the following measures:

- Habitat loss has for the most part been restricted to low distinctiveness habitats which have very limited ecological value.
- Proposals have sought to retain and enhance medium and high distinctiveness habitats where possible, however the scheme will result in some losses of native hedgerow/native hedgerow with trees. The proposals will provide compensatory hedgerow creation in the form of an additional 25m of species-rich native hedgerow.

Compensation

- 7.5 An additional 4.57 habitat units will be required in order to achieve a 10% biodiversity net gain. Additional units will be delivered through the following options, in order of preference and in accordance with the Biodiversity Net Gain Hierarchy:
- The developer to create additional units by enhancing or creating additional habitat elsewhere within the local authority or Natural Character Area (NCA).

- **Purchasing Units from a Local Habitat Bank:** Where an agreement cannot be sought for bespoke compensation, units can be purchased from any habitat banks run by the local planning authority or by a private provider. This will be delivered within Knowsley District, or same NCA (Lancashire and Amounderness Plain) where possible.
- **Purchasing Units from a Nearby Habitat Bank:** Where units are not available in Knowsley District, units will be purchased from a habitat bank in an adjacent Local Planning Authority Boundary/National Character Area.
- **Purchasing Units from a National Habitat Bank:** Where local habitat bank cannot be found, units can be purchased from a habitat bank elsewhere in England. Proximity will be considered while sourcing units, with the closest available units preferred.
- **Purchasing Statutory Credits:** Where units cannot be sought from a national habitat bank, statutory credits will be purchased. A sufficient number of units will be purchased to both meet the trading rules and to deliver the minimum 10% net gain requirement.

7.6 Units will only be purchased from Sites that are registered on Natural England's BNG Sites Register. Consequently, they will have been secured under a minimum 30-year legal agreement with habitat enhancements to be delivered through an agreed habitat management and monitoring plan (HMMP).

Securing BNG

7.7 The delivery of off-site habitat units will be secured through the mandatory Biodiversity Net Gain condition imposed by the Environment Act, 2021. Details of the off-site provision will be supplied as part of a Biodiversity Gain Plan which is to be submitted following receipt of planning permission in accordance with the Environment Act 2021 requirements.

7.8 Further details on habitat creation, enhancement and management can be provided at the detailed design stage of the proposals, where ecologists will input directly into landscape planting. A Habitat Management and Monitoring Plan will also be provided as part of a Biodiversity Gain Plan which, in accordance with the requirements of the Environment Act, will be provided following receipt of full planning permission. This HMMP will provide detail on how creation, retained and enhanced habitats across the Site that are significantly contributing to the Site's BNG will be managed for a minimum of 30 years.

7.9 Biodiversity Net Gain has been used to inform the habitat creation and enhancement proposals for the scheme and the resulting habitats will provide a betterment for local wildlife.

APPENDIX A: BASELINE HABITAT CONDITION ASSESSMENTS**Low Distinctiveness Grassland**

	G-1		G-2	
Condition Criteria	Criteria	Notes	Criteria	Notes
There are 6-8 vascular plant species per m2 present, including at least 2 forbs . Note - this criterion is essential for achieving Moderate or Good condition.	Fail	Ave 3 sp. 1 forb	Pass	Ave 6 sp. 4 forbs
Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	Fail		Fail	Some tussocks but less than 20%
Some scattered scrub (including bramble <i>Rubus fruticosus</i> agg.) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Pass		Fail	Scattered scrub throughout.
Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Pass		Pass	
Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	Fail	32.5	Pass	3.8
Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Pass		Pass	
There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA4).	Pass		Pass	
Total Passes	4		5	
Condition	Poor		Moderate	

Tall forbs

Condition Criteria	Criteria	Notes
Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	Fail	nettle dominant
The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	Pass	Willowherb, buttercup and cow parsley present
Invasive non-native plant species (listed on Schedule 9 of WCA1) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area. Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover)	Pass	
Total Passes	2	
Condition	Moderate	

Scrub

Condition Criteria	S-2	S-3	S-4	S-5
	Mixed	Blackthorn	Hawthorn	Mixed
The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). ¹ - At least 80% of scrub is native, - There are at least three native woody species ² , - No single species comprises more than 75% of the cover (except hazel <i>Corylus avellana</i> , common juniper <i>Juniperus communis</i> , sea buckthorn <i>Hippophae rhamnoides</i> or box <i>Buxus sempervirens</i> , which can be up to 100% cover).	Pass	Pass	Fail	Pass
Seedlings, saplings, young shrubs and mature (or ancient or veteran ²) shrubs are all present.	Fail	Fail	Fail	Pass
There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴) and species indicative of sub-optimal condition make up less than 5% of ground cover.	Pass	Pass	Pass	Pass
The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	Pass	Fail	Pass	Pass
There are clearings, glades or rides present within the scrub, providing sheltered edges.	Pass	Fail	Fail	Fail
Total Passes	4	2	2	4
Condition	Moderate	Poor	Poor	Moderate

Individual trees

Condition Criteria	T-2, T-4, T-5, T-11	T-12, t-14a, T-14b, T-14c	T-3	T-8	T-7
The tree is a native species (or at least 70% within the block are native species).	Fail	Pass	Fail	Pass	Fail
The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Pass	Pass	Pass	Pass	Pass
The tree is mature (or more than 50% within the block are mature).	Fail	Fail	Pass	Pass	Fail
There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Pass	Pass	Pass	Pass	Fail
Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Fail	Fail	Fail	Fail	Fail
More than 20% of the tree canopy area is oversailing vegetation beneath.	Pass	Pass	Pass	Pass	Pass
Total Passes	3	4	4	5	2
Condition	Moderate	Moderate	Moderate	Good	Poor

Woodland

Condition Criteria	W-1		W-2		W-3	
	Criteria	Notes	Criteria	Notes	Criteria	Notes
Age Distribution of Trees 3 - three age classes 2 - two age classes 1 - one age class	2		2		2	
Herbivore Damage 3 - no significant browsing 2 - significant browsing pressure <40% 1 - significant browsing pressure >40%	3		3		3	
Invasive Plant Species 3 - No invasive species 2 - invasive species <10% cover AND NO rhododendron or Cherry Laurel Present 1 - invasive species >10% cover or/and Rhododendron or cherry laurel present.	1		1		3	
Number of Native Species in the Upper Canopy 3 - 5+ native trees and/or shrubs 2 - 3-4 native trees and/or shrubs 1 - 2- native trees and/or shrubs	1	mainly oak and birch	1	mainly oak birch	1	Ash
Cover of Native Species 3 - >80% of canopy & understorey native 2 - 50-80% of canopy & understorey native 1 - <50% of canopy & understorey native	1	Non-natives more than 50%	1	circa 30% native canopy	1	sycamore more than 60%
Open Space 3 - 10-20% temporary open space If woodland area <10ha 0-20% temporary open space = Good 2 - 21-40% temporary open space 1 - <10% or >40% temporary open space	3		3		3	
Woodland Regeneration 3 - 3 age classes 2 - 1-2 age classes 1 - No classes or coppice regrowth	2	average of 2	2	very few seedlings some saplings	2	very few seedlings - not throughout

Tree Health 3 - <10% mortality, no pests/disease, no dieback 2 - 11-25% mortality, low risk pest or disease present 1 - >25% mortality, high risk pest or disease present	2	ash die back	3		1	Ash die back
Vegetation & Ground Flora 3 - Recognisable NVC community including ancient flora specialists 2 - Recognisable NVC community at ground level 1 - No recognisable NVC community	3	w10 four AWI	1	w10 like where open but bare elsewhere	1	
Woodland Vertical Structure 3 - Three or more storeys or a complex woodland 2 - Two storeys 1 - One or no defined storeys	2		2		2	
Veteran Trees 3 - 2+ veteran trees per ha 2 - 1 veteran tree per ha 1 - no veterans	1		1		1	
Amount of Deadwood 3 - 50%+ of plots have deadwood 2 - 25-50% of plots have deadwood 1 - <25% of plots have deadwood	2		2		2	
Disturbance and enrichment 3 - No nutrient enrichment or damaged ground 2 - <1ha of nutrient enrichment and /or less than 20% of woodland has damaged ground 1 - >1ha of nutrient enrichment and/or >20% of woodland has damaged ground	2	some damaged ground around ponds	3		2	Lawn clippings and garden waste/ Rubbish present locally
Total Score	25		25		24	
Condition	Poor		Poor		Poor	

Hedges

Hedge	A1 Height >1.5m	A2 width >1.5m	B1 Gap Hedge base	B2 - Gap hedge canopy	C1 - undisturbed ground	C2 - Nutrient Enriched Veg	D1 Invasives	D-2 Current damage	E-1 Tree Class	E-2 Tree health	Condition
H-1	Fail	Fail	Pass	Pass	Pass	Fail	Pass	Fail	N/a	N/a	Moderate
H-2	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Pass	N/a	N/a	Good
H-3	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Pass	N/a	N/a	Good
H-4	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Pass	N/a	N/a	Good
H-5	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Pass	N/a	N/a	Good
H-6	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Pass	Fail	Pass	Good
H-7	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Pass	N/a	N/a	Good
H-8	Pass	Pass	Pass	Pass	Pass	Fail	Fail	Pass	N/a	N/a	Good

Ponds

Condition Criteria	P-1		P-4		P-5		P-7		P-8	
	Criteria	Notes	Criteria	Notes	Criteria	Notes	Criteria	Notes	Criteria	Notes
The pond is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. Turbidity is acceptable if the pond is grazed by livestock.	Fail		Fail		Fail		Fail		Fail	
There is semi-natural habitat (moderate distinctiveness or above) completely surrounding the pond, for at least 10 m from the pond edge for its entire perimeter.	Pass		Fail	To west are crops within 6m	Pass		Pass		Pass	
Less than 10% of the water surface is covered with duckweed <i>Lemna spp.</i> or filamentous algae.	Fail	algae	Pass		Pass		Pass		Pass	
The pond is not artificially connected to other waterbodies, e.g. agricultural ditches or artificial pipework.	Pass		Pass		Pass		Pass		Pass	
Pond water levels can fluctuate naturally throughout the year. No obvious artificial dams, pumps or pipework.	Pass		Pass		Pass		Pass		Pass	
There is an absence of listed non-native plant and animal species.	Fail	rhododendron	Fail	rhododendrons & terrapin	Fail	rhododendron	Fail	rhododendrons	Fail	rhododendrons
The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.	Pass		Fail		Pass		Pass		Pass	
Woodland Pond?	Woodland Pond		Woodland Pond		Woodland Pond		Woodland Pond		Woodland Pond	
Total Passes	4		3		5		5		5	
Condition	poor		Poor		Moderate		Moderate		Moderate	

APPENDIX B: SPECIES LISTS**Arable Field margins**

Common Name	Scientific Name	DAFOR
Common Nettle	<i>Urtica dioica</i>	f
Common Ragwort	<i>Jacobaea vulgaris</i>	r
Creeping Thistle	<i>Cirsium arvense</i>	f
Barren brome	<i>Anisantha sterilis</i>	f
False oat-grass	<i>Arrhenatherum elatius</i>	o
Cock's-foot	<i>Dactylis glomerata</i>	f
Common hogweed	<i>Heracleum sphondylium</i>	o
Cleavers	<i>Galium aparine</i>	o
Greater burdock	<i>Arctium lappa</i>	o
Bracken	<i>Pteridium aquilinum</i>	o
Cow parsley	<i>Anthriscus sylvestris</i>	r
Ground elder	<i>Aegopodium podagraria</i>	o
Common ivy	<i>Hedera helix</i>	o
Raspberry	<i>Rubus idaeus</i>	o

Bracken

Common Name	Scientific Name	DAFOR
Bracken	<i>Pteridium aquilinum</i>	d
Bramble	<i>Rubus fruticosus agg.</i>	o
Common nettle	<i>Urtica dioica</i>	a
-	<i>moss sp.</i>	a
Raspberry	<i>Rubus idaeus</i>	o

Tall Forbs

Common Name	Scientific Name	DAFOR
Broad-leaved Dock	<i>Rumex obtusifolius</i>	r
Common Nettle	<i>Urtica dioica</i>	d
Common Ragwort	<i>Jacobaea vulgaris</i>	o
Creeping Buttercup	<i>Ranunculus repens</i>	f
Cleavers	<i>Galium aparine</i>	d
Cow parsley	<i>Anthriscus sylvestris</i>	lf
Willow sp.	-	r
Great willowherb	<i>Epilobium hirsutum</i>	la
Elder	<i>Sambucus nigra</i>	r
Bramble	<i>Rubus fruticosus agg.</i>	o

Modified Grassland G-1

Common Name	Scientific Name	Ref	g1										
		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	DAFOR	
	Bare Ground	40	35	35	40	40	5	10	30	50	40		
White Clover	<i>Trifolium repens</i>							3				r	
Broad-leaved Dock	<i>Rumex obtusifolius</i>										3	o	
Common Ragwort	<i>Jacobaea vulgaris</i>				2	2						o	
Creeping Buttercup	<i>Ranunculus repens</i>							40					
Creeping Thistle	<i>Cirsium arvense</i>											lf	
Perennial Rye-grass	<i>Lolium perenne</i>	40	15		60	15		30	50			a	
Meadow foxtail	<i>Alopecurus pratensis</i>	20	20				70			30		la	
Yorkshire-fog	<i>Holcus lanatus</i>	20	50	60		50	20	40	40	60	90	a	
Soft-brome	<i>Bromus hordeaceus</i>											o - la	
Cock's-foot	<i>Dactylis glomerata</i>											r	
Cow parsley	<i>Anthriscus sylvestris</i>											r	
Dandelion	<i>Taraxacum officinale agg.</i>		10				5					r	
Common mouse-ear	<i>Cerastium fontanum</i>							3				r	
Meadow buttercup	<i>Ranunculus acris</i>											o	
		Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Average per m2	
	GRASSLAND LOW Species/m2	3	4	1	2	3	3	5	2	2	2	3	
	Grassland LOW number of Forbs	0	1	0	1	1	1	3	0	0	1	1	
	% cover rye-grass & white clover	40	15	0	60	15	0	33	50	0	0	21	
	% cover Undesirables	0	0	0	2	2	0	43	0	0	3	5	
	% cover grasses	80	85	60	60	65	20	70	90	60	90	68	
	% cover wildflowers exc. Undesirables	0	10	0	0	0	5	3	0	0	0	2	
	Bare Ground											32.5	

Modified Grassland G-2

Type here	Scientific Name	Ref	g2				
		Q1	Q2	Q3	Q4	Q5	DAFOR
	Bare Ground	10	0	5	2	2	
Common Ragwort	<i>Jacobaea vulgaris</i>	3		3		5	r
Creeping Buttercup	<i>Ranunculus repens</i>	30			65	5	La
Creeping Thistle	<i>Cirsium arvense</i>					3	lf in damp areas
Spear Thistle	<i>Cirsium vulgare</i>						r
Perennial Rye-grass	<i>Lolium perenne</i>				5	10	lf
Yorkshire-fog	<i>Holcus lanatus</i>	30	50	40	15	10	f
Meadow foxtail	<i>Alopecurus pratensis</i>			3		10	o
Cock's-foot	<i>Dactylis glomerata</i>						f
Common sedge	<i>Carex nigra</i>						o
Soft-rush	<i>Juncus effusus</i>						o
	moss			20	10		o
Dandelion	<i>Taraxacum officinale agg.</i>	5	10	5	2	5	o
Cat's-ear	<i>Hypochaeris radicata</i>	3	10	30			r
Rosebay willowherb	<i>Chamaenerion angustifolium</i>						lf
Common vetch	<i>Vicia sativa</i>	15		3		1	o
Common fleabane	<i>Pulicaria dysenterica</i>					3	o
Cuckooflower	<i>Cardamine pratensis</i>						o
Hairy bitter-cress	<i>Cardamine hirsuta</i>	2					r
Blackthorn	<i>Prunus spinosa</i>		2				r
Red clover	<i>Trifolium pratense</i>						r
	<i>Willow sp.</i>						o - lf
		Q1	Q2	Q3	Q4	Q5	Average per m2
	GRASSLAND LOW Species/m2	7	4	7	5	9	6
	Grassland LOW number of Forbs	6	3	4	2	6	4
	% cover rye-grass & white clover	0	0	0	5	10	3
	% cover Undesirables	33	0	3	65	13	23
	% cover grasses	30	50	63	30	30	41
	% cover wildflowers exc. Undesirables	25	22	38	2	9	19
	Bare Ground						3.8

Scrub

Common Name	Scientific Name	S-1 Bramble Scrub	S-2 Mixed Scrub	S-3 Blackthorn Scrub	S-4 Hawthorn Scrub	S-5 Mixed Scrub
Bramble	<i>Rubus fruticosus agg.</i>	d		o	lf	f
Blackthorn	<i>Prunus spinosa</i>		o-lf	d		f
Hawthorn	<i>Crataegus monogyna</i>		o		lf	f
Willow sp.	-		f			f
Goat willow	<i>Salix caprea</i>					
Hazel	<i>Corylus avellana</i>					r
Pedunculate oak	<i>Quercus robur</i>	r	r			
Elder	<i>Sambucus nigra</i>	r				
Silver birch	<i>Betula pendula</i>		r			
Creeping thistle	<i>Cirsium arvense</i>	o r				o
Raspberry	<i>Rubus idaeus</i>	lf				
Soft-brome	<i>Bromus hordeaceus</i>	a				
Cow parsley	<i>Anthriscus sylvestris</i>	r			o	
Common nettle	<i>Urtica dioica</i>	lf		f	lf	
Rosebay willowherb	<i>Chamaenerion angustifolium</i>	r				
Great willowherb	<i>Epilobium hirsutum</i>	r				
cleaver	<i>Galium aparine</i>	lf				
Curled dock	<i>Rumex crispus</i>				r	
Common ragwort	<i>Jacobaea vulgaris</i>					

Ponds

Common Name	Scientific Name	P-1	P-4	P-5	P-7	P-8
Aquatic Vegetation					none	none
Frog-bit	<i>Hydrocharis morsus-ranae</i>		lf			
Marginal Vegetation					none	none
Yellow iris	<i>Iris pseudacorus</i>	r	la	lf		
Hemlock water-dropwort	<i>Oenanthe crocata</i>	f	la			
Soft-rush	<i>Juncus effusus</i>		o			
Bank Side Vegetation						
Hemlock water-dropwort	<i>Oenanthe crocata</i>		la	lf		
Rhododendron	<i>Rhododendron ponticum</i>	o	d	d	d	d
Soft-rush	<i>Juncus effusus</i>			r		
Bittersweet	<i>Solanum dulcamara</i>			r		
Remote sedge	<i>Carex remota</i>	o	o			

W-1 Knowles Pit

Common Name	Scientific Name	Upper canopy	understory	young tree	sapling	Seeding	Ground Flora Dafor	Ground Flora wet wood
Woody Species								
Sycamore	<i>Acer pseudoplatanus</i>	a			o	r lf		
Rhododendron	<i>Rhododendron ponticum</i>		o lf			o		
Hawthorn	<i>Crataegus monogyna</i>		r		r	r		
Whitebeam	<i>Sorbus anglica</i>			r	r			
hazel	<i>Corylus avellana</i>	r	o f					
Crack-willow	<i>Salix x fragilis</i>	lf		r				
Downy birch	<i>Betula pubescens</i>	o		r				
Alder	<i>Alnus glutinosa</i>	r						
Pedunculate oak	<i>Quercus robur</i>	o f				r		
Wild cherry	<i>Prunus avium</i>	r			r	r		
rowan	<i>Sorbus aucuparia</i>			o				
ash	<i>Fraxinus excelsior</i>	lo						
Garden privet	<i>Ligustrum ovalifolium</i>		lo					
Goat willow	<i>Salix caprea</i>							
Alder	<i>Alnus glutinosa</i>	r		r				
Grey willow	<i>Salix cinerea</i>			lo				
Bird cherry	<i>Prunus padus</i>		r					
Dogwood	<i>Cornus sanguinea</i>		lf					
Holly	<i>Ilex aquifolium</i>		r		r	r		
Turkey oak	<i>Quercus cerris</i>	lo w			r			
Field maple	<i>Acer campestre</i>	r						
Ground Flora								
Bramble	<i>Rubus fruticosus agg.</i>						f	
Common nettle	<i>Urtica dioica</i>						r	
Cleavers	<i>Galium aparine</i>						r	
Common ivy	<i>Hedera helix</i>						r lf	
Bracken	<i>Pteridium aquilinum</i>						o lf	
Broad buckler-fern	<i>Dryopteris dilatata</i>						o	
Yellow iris	<i>Iris pseudacorus</i>						r	lf

Remote sedge	<i>Carex remota</i>						lo	o f
Creeping soft-grass	<i>Holcus mollis</i>						f	
Red campion	<i>Silene dioica</i>						r	
Wood dock	<i>Rumex sanguineus</i>						r	o
Bittersweet	<i>Solanum dulcamara</i>						r	o
Hybrid bluebell	<i>Hyacinthoides x massartiana</i>						r	
Hemlock water-dropwort	<i>Oenanthe crocata</i>						lo	f
Creeping buttercup	<i>Ranunculus repens</i>						r	o
Greater plantain	<i>Plantago major</i>						r	
Cock's-foot	<i>Dactylis glomerata</i>						r	
<i>frog bit</i>	<i>Hydrocharis morsus-ranae</i>							lf
Lesser burdock	<i>Arctium minus</i>						r	
Male-fern	<i>Dryopteris filix-mas</i>						r	
Rough meadow-grass	<i>Poa trivialis</i>						r	r
Bluebell	<i>Endymion non-scriptus</i>						r	
Wild angelica	<i>Angelica sylvestris</i>						r	r
Scaly male-fern	<i>Dryopteris affinis</i>						r	
Wavy bitter-cress	<i>Cardamine flexuosa</i>						r	
Foxglove	<i>Digitalis purpurea</i>						r	
Daffodil	<i>native daffodil</i>						r	
Soft-rush	<i>Juncus effusus</i>							r
Wood avens	<i>Geum urbanum</i>						r	
Raspberry	<i>Rubus idaeus</i>						lf	
Garden Solomons seal	<i>Polygonatum multiflorum x odoratum</i>						r	

W-2 Howards Pit

Common Name	Scientific Name	Upper canopy	understory	young tree	sapling	Seeding	Ground Flora Dafor
Woody Species							
Sycamore	<i>Acer pseudoplatanus</i>	f a		r	o		
Hawthorn	<i>Crataegus monogyna</i>		r				
Turkey oak	<i>Quercus cerris</i>	r					
Pedunculate oak	<i>Quercus robur</i>	f	r				
Rhododendron	<i>Rhododendron ponticum</i>		a - d				
Hazel	<i>Corylus avellana</i>		r			r	
Downy birch	<i>Betula pubescens</i>	o		r	r		
Elder	<i>Sambucus nigra</i>		r				
rowan	<i>Sorbus aucuparia</i>			r	r		
holly	<i>Ilex aquifolium</i>		r				
Hybrid black-poplar	<i>Populus x canadensis</i>	r					
Garden privet	<i>Ligustrum ovalifolium</i>		r				
ash	<i>Fraxinus excelsior</i>	r					
Blackthorn	<i>Prunus spinosa</i>		r				
Snowberry	<i>Symphoricarpos albus</i>		r				
Common whitebeam	<i>Sorbus aria</i>			r			
Ground Flora							
Bramble	<i>Rubus fruticosus agg.</i>						o lf
Red campion	<i>Silene dioica</i>						r
Creeping soft-grass	<i>Holcus mollis</i>						lo
Cow parsley	<i>Anthriscus sylvestris</i>						r
Male-fern	<i>Dryopteris filix-mas</i>						o
Broad buckler-fern	<i>Dryopteris dilatata</i>						r
Rough meadow-grass	<i>Poa trivialis</i>						r
Remote sedge	<i>Carex remota</i>						lo
Bluebell	<i>Endymion non-scriptus</i>						lo
Soft-rush	<i>Juncus effusus</i>						r
Enchanter's-nightshade	<i>Circaea lutetiana</i>						r

Wavy bitter-cress	<i>Cardamine flexuosa</i>						r
Common nettle	<i>Urtica dioica</i>						r
Cleavers	<i>Galium aparine</i>						r
Bittersweet	<i>Solanum dulcamara</i>						r
Broad-leaved dock	<i>Rumex obtusifolius</i>						r
Bracken	<i>Pteridium aquilinum</i>						r
Black bryony	<i>Dioscorea communis</i>						r
Great willowherb	<i>Epilobium hirsutum</i>						r
Tufted hair-grass	<i>Deschampsia caespitosa</i>						r

W-3

Common Name	Scientific Name	Upper canopy	understory	young tree	sapling	Seeding	Ground Flora Dafor
Woody Species							
Ash	<i>Fraxinus excelsior</i>	d					
Sycamore	<i>Acer pseudoplatanus</i>	f			f	o	
Hawthorn	<i>Crataegus monogyna</i>			o			
Pedunculate oak	<i>Quercus robur</i>			r	r		
Holly	<i>Ilex aquifolium</i>			r			
Elder	<i>Sambucus nigra</i>			r			
Lime	<i>Tilia x europaea</i>		r				
Ground Flora							
Bramble	<i>Rubus fruticosus agg.</i>						a
Common ivy	<i>Hedera helix</i>						a
Hybrid bluebell	<i>Hyacinthoides x massartiana</i>						a
Common nettle	<i>Urtica dioica</i>						a
Ground elder	<i>Aegopodium podagraria</i>						lf
Green alkanet	<i>Pentaglottis semervirens</i>						o
Herb-robert	<i>Geranium robertianum</i>						r
Cleavers	<i>Galium aparine</i>						r

H-1

Common Name	Scientific Name	Dafor	30m - 1	30m - 2	30m - 3	Veteran standard	Mature standard	Young standard
Hawthorn	<i>Crataegus monogyna</i>	d	y	y	y			

Sycamore	<i>Acer pseudoplatanus</i>	r	y		y			
Elder	<i>Sambucus nigra</i>	f	y	y				
Ash	<i>Fraxinus excelsior</i>	r						
Pedunculate oak	<i>Quercus robur</i>						1	

H-2

Common Name	Scientific Name	Dafor	30m - 1	30m - 2	30m - 3	Veteran standard	Mature standard	Young standard
Hawthorn	<i>Crataegus monogyna</i>	f	y	y	y			
Blackthorn	<i>Prunus spinosa</i>	f						
Hazel	<i>Corylus avellana</i>	f	y					
Cherry laurel	<i>Prunus laurocerasus</i>	r						
Willow leaved cotoneaster	<i>Cotoneaster salicifolius</i> -	r						
Rosa sp	-		y					
Elder	<i>Sambucus nigra</i>	r						
Horse chestnut	<i>Aesculus hippocastanum</i>	r			y			
Wild cherry	<i>Prunus avium</i>	r						
Russian vine	<i>Fallopia baldschuanica</i> -	ld		y				

H-3

Common Name	Scientific Name	Dafor	30m - 1	Veteran standard	Mature standard	Young standard
Hawthorn	<i>Crataegus monogyna</i>	d	y			
Ash	<i>Fraxinus excelsior</i>	r	y			

H-4

Common Name	Scientific Name	Dafor	30m - 1	Veteran standard	Mature standard	Young standard
Hawthorn	<i>Crataegus monogyna</i>	d	y			
Sycamore	<i>Acer pseudoplatanus</i>	r	y		1	2
Common ivy	<i>Hedera helix</i>	f	y			

H-5

Common Name	Scientific Name	Dafor	30m - 1	30m - 2	Veteran standard	Mature standard	Young standard
Hawthorn	<i>Crataegus monogyna</i>	d	y	y			
Elder	<i>Sambucus nigra</i>	r					

H-6

Common Name	Scientific Name	Dafor	30m - 1	Veteran standard	Mature standard	Young standard
Hawthorn	<i>Crataegus monogyna</i>	d	y			
Pedunculate oak	<i>Quercus robur</i>	r	y			

Elder	<i>Sambucus nigra</i>	o	y			
Goat willow	<i>Salix caprea</i>	lf	y		3	
Horse chestnut	<i>Aesculus hippocastanum</i>	r	y			

H-7

Common Name	Scientific Name	Dafor	30m - 1	30m - 2	Veteran standard	Mature standard	Young standard
Hawthorn	<i>Crataegus monogyna</i>	d	y	y			
Ash	<i>Fraxinus excelsior</i>						1

H-8

Common Name	Scientific Name	Dafor	30m - 1	Veteran standard	Mature standard	Young standard
Hawthorn	<i>Crataegus monogyna</i>	f	y			
Sycamore	<i>Acer pseudoplatanus</i>	f	y			

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N

0

50

100 m

Red Line Boundary

Baseline Habitats

Artificial unvegetated, unsealed surface

Blackthorn scrub

Bracken

Bramble scrub

Cereal crops

Hawthorn scrub

Lowland mixed deciduous woodland

Mixed scrub

Modified grassland

Other woodland; broadleaved

Ponds (non-priority habitat)

Tall forbs

Baseline Hedgerow

Native hedgerow

Native hedgerow with trees

Baseline Individual Trees

Existing medium urban tree

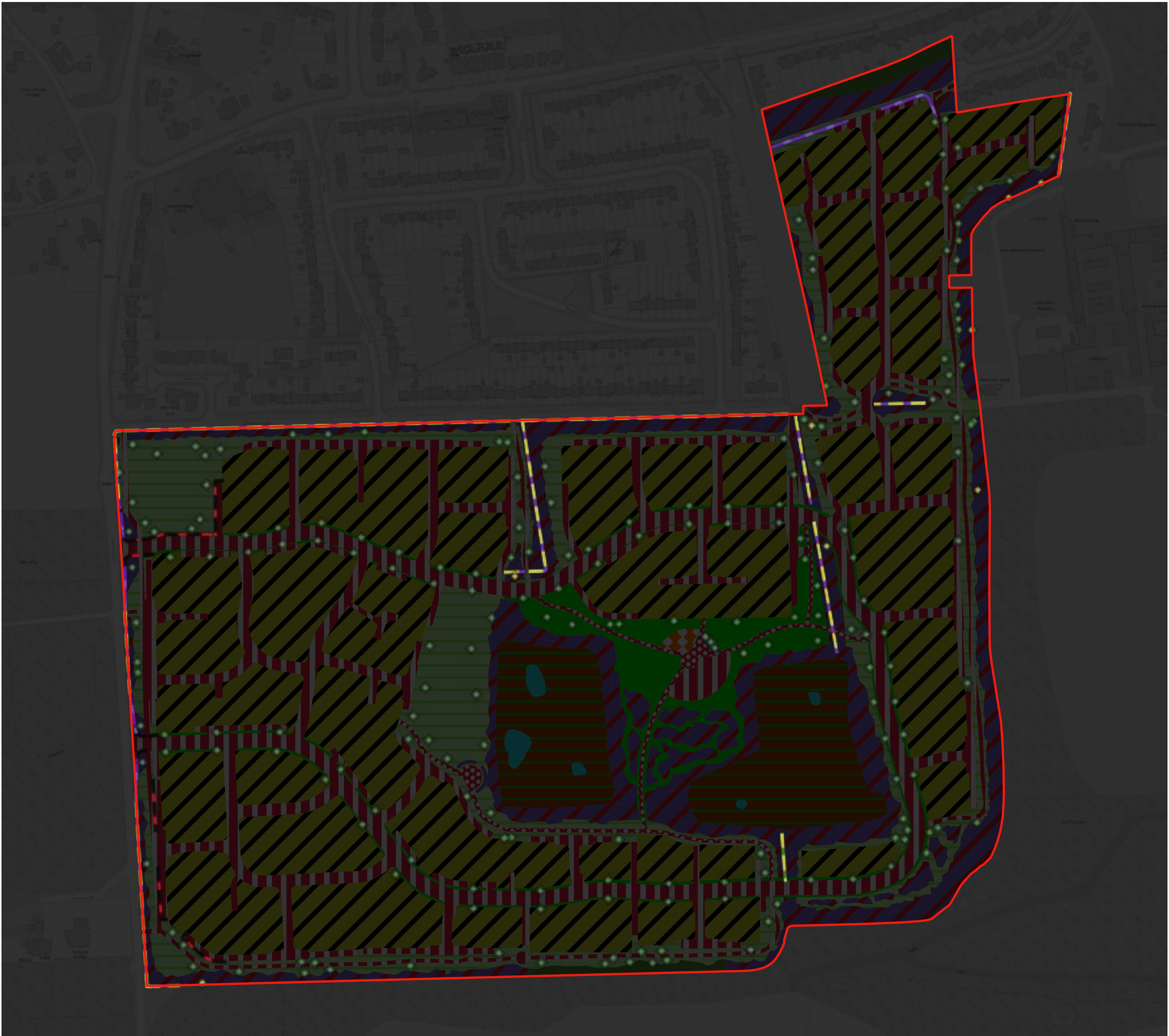
Existing small urban tree

date	07/08/25	drwn/chkd	DV / ER
client	Hallam Land Management Ltd		
project	Land east of Knowsley Lane, Knowsley		
title	BASELINE HABITAT PLAN	scale	1:3,000 @ A3
number	FIGURE 7.12.1	rev	-

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N

0

50

100 m

Red Line Boundary

Proposed Habitats

Artificial unvegetated, unsealed surface

Developed land; sealed surface

Introduced shrub

Lowland mixed deciduous woodland

Mixed scrub

Modified grassland

Other neutral grassland

Other woodland; broadleaved

Ponds (non-priority habitat)

Traditional orchards

Residential

Proposed Hedgerows

Non-native and ornamental hedgerow

Native hedgerow

Native hedgerow with trees

Species-rich native hedgerow

Proposed Individual Trees

Proposed small urban tree

Retained small urban tree

date

07/08/25

client

Hallam Land Management Ltd

project

Land east of Knowsley Lane,
Knowsley

title

PROPOSED HABITAT PLAN

scale

1:3,000 @ A3

number

FIGURE 7.12.2

rev

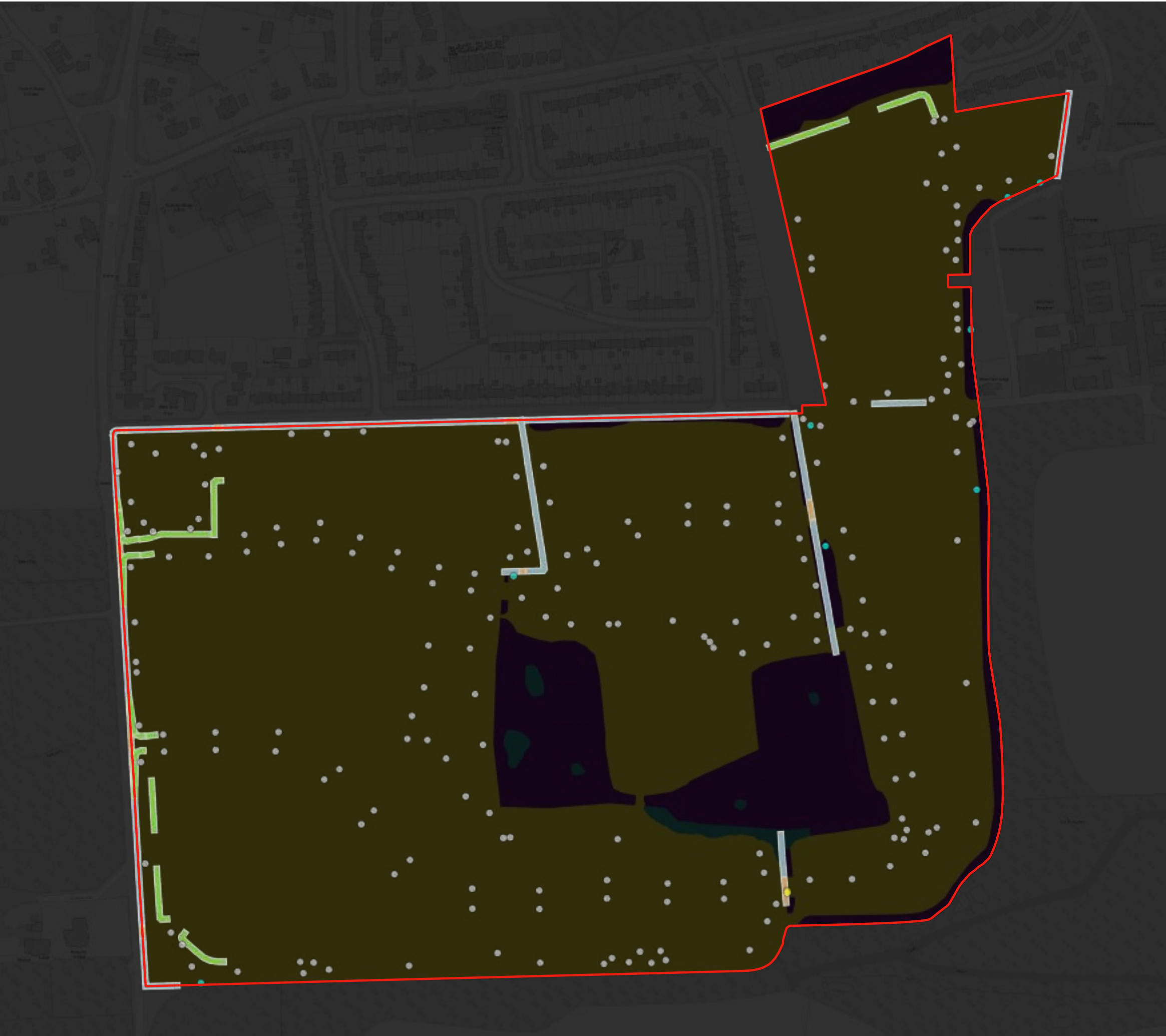
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- Red Line Boundary
- Habitats
 - Enhanced
 - Retained
 - Lost
- Hedgerows
 - Created
 - Retained
 - Lost
- Individual Trees
 - Created
 - Retained
 - Proposed Lost

date	07/08/25	drwn/chkd	DV / ER
client	Hallam Land Management Ltd		
project	Land east of Knowsley Lane, Knowsley		
title	HABITAT RETENTION PLAN	scale	1:3,000 @ A3
number	FIGURE 7.12.3	rev	-



- Red Line Boundary**
- Baseline Habitat Condition**
- Moderate
 - Poor
 - N/A - Other
 - Condition Assessment N/A
- Baseline Habitat Distinctiveness**
- High
 - Medium
 - Low
 - V.Low
- Baseline Hedgerow Condition**
- Good
 - Moderate
- Baseline Hedgerow Distinctiveness**
- Medium
 - Low
- Baseline Individual Tree Condition**
- Moderate
 - Good
- Baseline Individual Tree Distinctiveness**
- Medium

date		drwn/chkd	
07/08/25		DV / ER	
client			
Hallam Land Management Ltd			
project			
Land east of Knowsley Lane, Knowsley			
title		scale	
BASELINE HABITAT CONDITION AND DISTINCTIVENESS PLAN		1:3,000 @ A3	
number		rev	
FIGURE 7.12.4		-	



N

0

50

100 m

Red Line Boundary

Proposed Habitat Condition

Good

Moderate

Poor

N/A - Other

Condition Assessment N/A

Proposed Habitat Distinctiveness

High

Medium

Low

V.Low

Proposed Hedgerow Condition

Good

Moderate

Poor

Proposed Hedgerow Distinctiveness

Medium

Low

V.Low

Proposed Individual Tree Condition

Poor

Moderate

Good

Proposed Individual Tree Distinctiveness

Medium

date

07/08/25

drwn/chkd

DV / ER

client

Hallam Land Management Ltd

project

Land east of Knowsley Lane,
Knowsley

title

PROPOSED HABITAT CONDITION
AND DISTINCTIVENESS PLAN

scale

1:3,000 @ A3

number

FIGURE 7.12.5

rev

-

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