



BIODIVERSITY NET GAIN ASSESSMENT
RIDGE FARM
SOUTHAMPTON
HAMPSHIRE
SO31 8GD

JUNE 2025

ON BEHALF OF PURE TOWN PLANNING LTD



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1.0 EXECUTIVE SUMMARY

- 1.1 LC Ecological Services Limited was commissioned by Pure Town Planning Ltd to undertake a Biodiversity Net Gain Assessment to assess the potential to achieve Biodiversity Net Gain from the construction of a gravel parking area at Ridge Farm, Southampton, Hampshire (Ordnance Survey grid reference: SU 46738 09586).
- 1.2 The purpose of this report is to identify the net percentage change in biodiversity value on site post-development and to establish whether a minimum of 10% Biodiversity Net Gain can be delivered in accordance with the mandatory national policy requirements.
- 1.3 The baseline habitat survey was conducted using the UK Habitat Classification assessment methodology (UKHab, 2023). Condition assessments were undertaken using Defra's Statutory biodiversity metric condition assessment methodology (Defra, 2024b).
- 1.4 The baseline habitats include modified grassland, other neutral grassland, bramble scrub, individual rural trees, non-native and ornamental hedgerow, artificial unvegetated unsealed surface, developed land; sealed surface, and developed land; sealed surface (buildings). Cleared habitat included modified grassland. The combined current habitats and cleared habitats have a baseline value of 3.44 habitat units and 0.40 linear units.
- 1.5 The current proposals result in a net loss **of – 0.47 habitat units (- 13.74%) and – 0.08 linear units (-20.55%) and could achieve a net gain of + 0.37 habitat units (10.72%) and + 0.05 linear units (+ 13.21%) with the trading rules being satisfied.**
- 1.6 The minimum target of 10% has not been achieved for habitats or linear features based on the current proposals, as there is a deficit of 0.82 habitat units and 0.12 linear units. The site would require low distinctiveness habitat units and very low distinctiveness linear units or above.
- 1.7 To ensure that habitats created on-site and off-site reach their target condition, a Biodiversity Net Gain Habitat Management and Monitoring Plan (HMMP) will need to be created and implemented. Any proposed habitats and features created (either on, or off-site will need to be managed and maintained over a minimum of 30-year aftercare period, in line with the mandatory requirements.

2.0 INTRODUCTION

Project brief

- 2.1 This Biodiversity Net Gain assessment, prepared by LC Ecological Services limited (LCES), was undertaken to assess the potential to achieve Biodiversity Net Gain (BNG) from the construction of a gravel parking area at Ridge Farm, Southampton, Hampshire (Ordnance Survey grid reference: SU 46738 09586). The site location plan is shown in appendix I.

Preparation of Biodiversity Net Gain Assessment

- 2.2 This assessment was prepared using the Defra's Statutory Biodiversity Metric (2024b).

Site context and location

- 2.3 The site is located on the outskirts on Bursledon. The site comprises modified grassland, other neutral grassland, bramble scrub, individual rural trees, non-native and ornamental hedgerow, artificial unvegetated unsealed surface, developed land; sealed surface, and developed land; sealed surface (buildings).

Purpose of the report

- 2.4 The purpose of this report is to outline the following:
- To identify the net percentage change in biodiversity value on site following the most recent design proposals.
 - To establish whether a minimum of 10% BNG can be delivered, in accordance with the mandatory national policy.
 - To demonstrate that the net gain commitment can be obtained with reasonable and viable habitat creation which can be maintained in the long-term.

3.0 LEGISLATION AND POLICY CONTEXT

3.1 Chapter 15 of the National Planning Policy Framework (NPPF, 2024) '*Conserving and enhancing the natural environment*' sets out the Government's policies on biodiversity, landscape, and geological conservation. Relevant paragraphs within this chapter include:

- **Paragraph 187:** Recognise the wider benefits of ecosystem services and minimise impacts on biodiversity, providing net gains in biodiversity.
- **Paragraph 188:** Planning positively and distinguishing between the hierarchy of designated sites and allocating land with the least environmental value and maintaining and enhancing networks of habitats and green infrastructure.
- **Paragraph 192:** Protect and enhance biodiversity and geodiversity by safeguarding wildlife-rich habitats and wider ecological networks; promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and securing biodiversity net gain.
- **Paragraph 193:** Refuse development if found to have significant harm to biodiversity; is on land within or outside a Site of Special Scientific Interest (SSSI) which is likely to have an adverse effect; if results in the loss or deterioration of irreplaceable habitats. Developments with the primary objective to conserve or enhance biodiversity will be supported, while opportunities to improve biodiversity in and around developments should be integrated as part of their design and can secure measurable net gains for biodiversity or enhance public access to nature.
- **Paragraph 194:** Protection to be given to potential SPA and possible SACs, proposed Ramsar sites, and sites identified or required as compensatory measures for impacts to these sites.
- **Paragraph 195:** Considers if the development is to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

3.2 From 12th February 2024, delivery of 10% Biodiversity Net Gain became mandatory for most developments, through the Environment Act 2021. Small developments were required to achieve this net gain from 2nd April 2024.

Current regulations and guidance have been included here for context (DLUHC, 2023):

- **The Environment Act 2021 (Commencement No.8 and Transitional Provisions) Regulations 2024:** Establishes the official start date for the mandatory requirement of Biodiversity Net Gain (BNG) for most types of new planning applications in England. It also outlines transitional provisions to ensure a smooth transition from the existing system to the new BNG requirement.
- **The Biodiversity Net Gain Requirements (Exemptions) Regulations 2024:** Specifies categories of development that are exempt from the BNG requirement, such as projects deemed to have minimal impact on biodiversity. This regulation aims to ensure that BNG is focused on developments that have a significant impact on the natural environment.
- **The Biodiversity Gain (Town and Country Planning) (Modifications and Amendments) (England) Regulations 2024:** Amends existing planning regulations to incorporate provisions related to BNG, including requirements for planning applications, Biodiversity Gain Plans, and phased developments. This regulation aims to streamline the delivery of BNG and ensure it is effectively integrated into the planning process.

3.3 Relevant planning policies within the Eastleigh Borough Local plan 2016-2036 (2022) include:

- Policy DM11: Nature Conservation
- Policy DM6: Sustainable Surface Water Management and Watercourse Protection

4.0 ASSESSMENT METHODOLOGY

Study Area

- 4.1 The application area is located around Ordnance Survey (OS) grid reference SU 46738 09586. The site location plan for the development proposals is provided in appendix I, the baseline habitat plan is provided in appendix II, and the proposed habitats are provided in appendix IV.

Sources of information

- 4.2 The initial walkover survey was undertaken by Senior Ecologist Ben Willers on the 4th April 2025. The habitats present were classified according to the UK Habitat Classification Version 2.0 (UKHABS, 2023) methods and criteria for this assessment.
- 4.3 A description of the vegetation was noted, listing species encountered and scoring their abundance using the DAFOR scale shown below, whilst recording plant species using nomenclature according to Stace (2019).
- D Dominant
 - A Abundant
 - F Frequent
 - O Occasional
 - R Rare
 - L Local (used as a prefix to any of the above).
- 4.4 The habitat survey recorded the habitat types across the site with a record made of the botanical interest in each area. A condition assessment was then conducted by using the data obtained from this survey.
- 4.5 Habitats recorded on site were transposed into a digital map using QGIS coordinate referencing system OSGB 1936/ British National Grid.
- 4.6 Habitats recorded on site were measured using the derived areas (Ellipsoidal – EPSG 7001) and habitat areas are provided in hectares. Linear features were measured using the derived length (Ellipsoidal – EPSG 7001) and the measurements provided in kilometres.

Assessment Process

- 4.7 The BNG assessment was undertaken in accordance with the CIRA *Biodiversity Net Gain – Good Practice Principles for Developments* (CIRA, 2019).
- 4.8 To undertake the BNG assessment the habitat classification notes obtained from the baseline botanical assessment were inserted into the BNG calculator using the technical data provided in the appendices of the calculator tool.
- 4.9 The level of mitigation applied was done in accordance with the mitigation hierarchy outlined in table 11.5 of the *Biodiversity Net Gain – Good Practice Principles for Developments* (CIRA, 2019), and has been provided below:

Any combination of these factors might apply	
Does the habitat affected have high biodiversity value?	When a project affects rare habitats, creating new areas of the habitat is often required to ensure no reduction in cover. This only applies after strict application of the mitigation hierarchy, and does not apply to irreplaceable habitat or statutory designated sites. Enhancing existing habitats that should have high biodiversity value, but that are currently degraded, could generate valuable benefits for biodiversity.
Does the habitat affected provide a critical ecological function?	When a project affects critical ecological functions, creating new habitat that provides equivalent or better ecological functions is often required to ensure no reduction in provision of the function.
Do stakeholders or local policies prioritise enhancements in the habitat over increasing its coverage?	Enhancing existing habitats could contribute to this priority.
Alternatively, do stakeholders or local policies prioritise increases in habitat cover?	Creating new habitat could be most appropriate.
Is provision of green space a priority issue locally?	Projects that achieve BNG by enhancing habitats elsewhere, although resulting in a loss of green space, can cause significant negative consequences locally.
Are existing habitats at risk from future threats and/or under continued decline?	Enhance habitat to secure its long-term future, eg by making habitat more resilient to other pressures, such as the effects of climate change. Also protect habitats in decline from declining further (also known as averted loss).

- 4.10 The matrix was completed by David Caplin BSc. (Hons.), MSc. David provides expertise in land management and GIS. He has run training courses for ecologists in the use of GIS in conservation. He has gained experience in BNG in the last year, and is developing further experience with BNG, including new workflows and data accountability.

- 4.11 The following guidance was used:

- The UK Habitat Classification v2.0 (UKHab, 2023). Originally The UK Habitat Classification v1.1 (Butcher *et al.* 2020).

- UK Biodiversity Action Plan, Priority Habitat Descriptions (JNCC, 2018)
- The Statutory Biodiversity Metric. User Guide (Defra, 2024a)
- The Statutory Biodiversity Metric -Technical Annex 1: Condition Assessment Sheets and Methodology (Defra, 2024b).

Limitations

- 4.12 Whilst every effort has been made to accurately map the habitats on site there may be discrepancies associated with the projected coordinate reference system. However, the National Grid transformation is considered to be the most accurate with an accuracy level of less than 1 metre.
- 4.13 The botanical survey was conducted on 4th April 2025, which falls outside the optimal botanical survey season. However, it was still possible to assess the condition of the habitats, as key structural features and dominant species characteristic of the onsite habitat types were readily identifiable at the time of survey. Additionally, due to the type of habitats present, the likelihood of significant botanical species being overlooked is low.
- 4.14 The condition assessment was undertaken based on the results of the botanical survey. The condition can only be determined on the day of the survey. Some of the criteria associated with the condition of the habitats could change such as sward height, physical damage, bare ground, and cover of undesirable species, and thus impacting the overall score if assessed at a different time of the year.

5.0 BASELINE

Habitats

- 5.1 The habitat types within the site were noted during the survey visit conducted in April 2025. The habitats are summarised below with the baseline habitat map in appendix II, pre-clearance habitat map in appendix IV, and the condition assessment sheets in appendix V.
- 5.2 A summary of the baseline value habitats within the red line boundary are as follows:
- Modified grassland (g4)
 - Other neutral grassland (g3c)
 - Bramble scrub (h3d)
 - Individual rural trees (g4, 203)
 - Non-native and ornamental hedgerow (h2b)
 - Artificial unvegetated, unsealed surface (u1c, 510)
 - Developed land; sealed surface (u1b)
 - Developed land; sealed surface - building (u1b5)

Modified grassland (g4)

- 5.3 A large area of modified grassland with a short sward due to regular mowing is located in the north of the site. This habitat is dominated by perennial ryegrass (*Lolium perenne*). Other species recorded here include abundant amounts of annual meadow-grass (*Poa annua*), frequent amounts of Yorkshire-fog (*Holcus lanatus*), creeping buttercup (*Ranunculus repens*), clover species (*Trifolium sp.*), daisy (*Bellis perennis*), and dandelion (*Taraxacum officinale*), occasional amounts of smooth cat's ear (*Hypochaeris glabra*), ragwort (*Jacobaea vulgaris*), and ribwort plantain (*Plantago lanceolata*), locally occasional amounts of chickweed (*Stellaria media*) and vetch species (*Vicia sp.*), and rare amounts of spear thistle (*Cirsium vulgare*), and bristly oxtongue (*Helminthotheca echioides*).
- 5.4 A smaller parcel of modified grassland is located adjacent to the eastern boundary, aligned approximately midway between the northern and southern boundaries. The majority of this area is used to store boat making equipment. The sward here is short. Species recorded here included abundant amounts of ribwort plantain, locally abundant amounts of creeping buttercup and clover species, frequent amounts of hairy bittercress (*Cardamine hirsute*) and broad-leaved dock (*Rumex obtusifolius*), locally frequent amounts of scented

mayweed (*Matricaria chamomilla*), occasional amounts of creeping bent (*Agrostis stolonifera*), and rare amounts of red dead-nettle (*Lamium purpureum*), spear thistle, common nettle (*Urtica dioica*), spear-leaved willowherb (*Epilobium lanceolatum*), bristly oxtongue, and bramble (*Rubus fruticosus* agg.).

- 5.5 Two small areas of modified grassland are located in the east of the site. Species recorded here included dominant perennial rye-grass, frequent amounts of daisy and dandelion, and occasional amounts of annual meadow-grass.
- 5.6 Modified grassland is a low distinctiveness habitat in poor condition.

Other neutral grassland (g3c and g3c, 50)

- 5.7 A bund is adjacent to the northern boundary. The bund has been colonised by abundant amounts of perennial rye-grass, annual meadow-grass, and Yorkshire-fog, locally abundant amounts of ground ivy (*Glechoma hederacea*), frequent amounts of ragwort, creeping buttercup, groundsel (*Senecio vulgaris*), ribwort plantain, broad-leaved dock, and common nettle, occasional amounts of scented mayweed, bristly oxtongue, and spear thistle, and a rare amount of red dead-nettle.
- 5.8 A small ditch is present in the east of the site. Species recorded within this habitat include dominant red dead-nettle, frequent amounts of groundsel, spear-leaved willowherb, and annual meadow-grass, occasional amounts of cut-leaved crane's-bill (*Geranium dissectum*), dandelion, and prickly lettuce (*Lactuca serriola*), and rare amounts of bramble, ragwort, vetch species, smooth sow-thistle (*Sonchus oleraceus*), cleavers (*Galium aparine*), common fleabane (*Pulicaria dysenterica*), Yorkshire-fog, wild radish (*Raphanus raphanistrum*), common sorrel (*Rumex acetosa*), creeping thistle (*Cirsium arvense*), thale cress (*Arabidopsis thaliana*), and petty spurge (*Euphorbia peplus*).
- 5.9 Other neutral grassland is a medium distinctiveness habitat in poor condition.

Bramble scrub (h3d)

- 5.10 A patch of bramble scrub is adjacent to the northern boundary in the west of the site.
- 5.11 Bramble scrub is a medium distinctiveness habitat with no condition assessment.

Individual rural trees (g4, 203)

- 5.12 A medium sized ash (*Fraxinus excelsior*) tree and two small sized ash trees are located in the north-west of the site adjacent to the northern boundary.
- 5.13 Individual rural trees are a medium distinctiveness habitat in moderate condition.

Non-native and ornamental hedgerow (h2b)

- 5.14 A hedge comprising Leyland cypress (*Cypress leylandii*) is adjacent to the southern half of the eastern boundary.
- 5.15 Part of a hedge comprising Leyland cypress is located in the north-west of the site.
- 5.16 A hedge comprising Leyland cypress is located in the south-west of the site.
- 5.17 A cherry laurel (*Prunus laurocerasus*) hedge is located in the south of the site adjacent to the western boundary.
- 5.18 A hedge comprising dominant Leyland cypress, a rare amount of holly (two instances), and locally rare amounts of hawthorn (*Crataegus monogyna*) (one instance) is present in the south of the site.
- 5.19 Non-native and ornamental hedgerow is a very low distinctiveness habitat in poor condition.

Artificial unvegetated, unsealed surface (u1c, 510)

- 5.20 A gravel carpark is located near the centre of the site. Several gravel tracks are present within the southern half of the site.
- 5.21 Artificial unvegetated, unsealed surface is a very low distinctiveness habitat with no condition assessment.

Developed land; sealed surface (u1b)

- 5.22 The majority of the southern half of the site comprises tarmac areas. A small patio area is located directly south of the bungalow in the west of the site.

- 5.23 Developed land; sealed surface is a very low distinctiveness habitat with no condition assessment.

Developed land; sealed surface (buildings) (u1b5)

- 5.24 Multiple industrial units and shipping containers are present within the southern half of the site. A bungalow is also present and is located near the west of the site.
- 5.25 Developed land; sealed surface (buildings) is a very low distinctiveness habitat with no condition assessment.

Cleared habitat

- 5.26 An assessment of site before clearance was undertaken using Google Earth imagery. Google Earth Imagery from 2020 confirmed that the area where the gravel carpark is located supported modified grassland and non-native ornamental hedgerow.

Summary of baseline value

- 5.27 The baseline has used the assumptions that the now cleared area of modified grassland was the same condition as the adjacent modified grassland of which it was once a part of. It was also assumed that the condition of the now cleared non-native ornamental hedgerow was in the same condition as the other on-site non-native ornamental hedgerows, which is poor condition.
- 5.28 The baseline area, value and condition assessment for the habitats described above are summarised in table 1 below:

Table 1: Condition assessment of habitat type.

Habitat units				
Habitat type	Distinctiveness	Condition	Area (ha)	Biodiversity units
Habitats				
Developed land; sealed surface	V. low	N/A	0.219	0
Developed land; sealed surface	V. low	N/A	0.543	0
Artificial unvegetated, unsealed surface	V. low	N/A	0.13	0
Modified grassland	Low	Poor	1.45	2.90
Other neutral grassland	Medium	Poor	0.052	0.21
Bramble scrub	Medium	N/A	0.033	0.13

Rural tree	Medium	Moderate	0.024429024	0.20
Total			2.451429024	3.64
Linear features				
Habitat Type	Distinctiveness	Condition	Length (km)	Biodiversity units
Non-native and ornamental hedgerows	V. Low	Poor	0.399	0.40
Total			0.399	0.40

6.0 BNG GOOD PRACTICE FOR PRINCIPLES FOR DEVELOPMENT

- 6.1 As part of the BNG process there are ten good practice principles that help to achieve BNG if they are followed. Each principle is described below and how the project has addressed each principle.

Apply the Mitigation Hierarchy

- 6.2 The design of the development has tried to utilise the mitigation hierarchy by avoidance to any adverse impacts on habitats and species on site.
- 6.3 Species recorded on site are of low ecological value, and no priority habitats were recorded.
- 6.4 The development has not resulted in any adverse impacts by following the mitigation hierarchy.

Avoid losing biodiversity that cannot be offset by gains elsewhere

- 6.5 Habitats that are considered 'irreplaceable' are those that would be technically difficult to recreate, replace, or restore once destroyed. Habitats such as ancient woodland and veteran trees are considered irreplaceable due to the time it takes to reach such condition. Irreplaceable habitat includes factors that contribute to the condition of that habitat including age, environmental context, achievability to recreate, and its geographical position within the landscape.
- 6.6 The site does not support any habitats of principal importance.

Be inclusive and equitable

- 6.7 Discussions have been had on ways to reduce the loss of habitats on site.

Address risks

- 6.8 All habitats have been calculated within the red line boundary, including habitats within the development footprint. No additional land for the construction phase and site compounds has been included within the calculator.

- 6.9 Habitats to be created will be done so by appointed contractors who have experience in habitat creation, with the guidance of the appointed ecologist.

Make a measurable Net Gain contribution

- 6.10 The development has been measured against The Statutory Biodiversity Metric. The development has reduced its overall impact throughout the design of the scheme where possible.

Achieving the best outcomes for biodiversity

- 6.11 The habitats on site include modified grassland, other neutral grassland, bramble scrub, individual rural trees, non-native and ornamental hedgerows, artificial unvegetated unsealed surface, developed land; sealed surface, and developed land; sealed surface (buildings). The site provides the potential to support badger (*Meles meles*), foraging and commuting bats, nesting birds, and common reptile species and will continue to do so.

Additional enhancements

- 6.12 Measures including bat and bird boxes will be included. These however are not measurable as part of the BNG metric.

Be transparent

- 6.13 Through the progression of the development, the design team and client have all been made aware of the communications and outcomes of the BNG.

Create a Net Gain legacy

- 6.14 Including native planting will provide nectar or invertebrates and habitat for nesting birds, foraging bats, amphibians and reptiles.

Optimise sustainability

- 6.15 The landscaping plan for the development aims to be as sustainable as possible and provide net gain on site in an environment that will not be affected by further development.

7.0 IMPACT ASSESSMENT

Baseline habitat loss

7.1 The development has resulted in the partial loss of modified grassland and non-native ornamental hedgerow on site.

Habitat lost

7.2 Table 2 provides a summary of the habitats and biodiversity units to be retained and lost as part of the proposals.

Table 2: Habitats to be retained and lost as part of the proposals.

Habitat type	Baseline units	Area retained	Baseline units retained	Area lost	Units lost
Habitats					
Developed land; sealed surface	0	0.219	0	0	0
Developed land; sealed surface	0	0.543	0	0	0
Artificial unvegetated; unsealed surface	0	0.13	0	0	0
Modified grassland	2.90	1.214	2.43	0.24	0.47
Other neutral grassland	0.21	0.052	0.21	0	0
Bramble scrub	0.13	0.033	0.13	0	0
Rural trees	0.20	0.024429	0.20	0	0

Total habitat area	3.44	2.215429	2.97	0.24	0.47
Linear features					
Habitat	Baseline units	Length enhanced	Baseline units retained	Length lost	Units lost
Non-native and ornamental hedgerow	0.40	0	0.32	0.08	0.08

Habitat Created

- 7.2 The proposals will create 0.236 hectares of artificial unvegetated unsealed surface that provides no habitat units.
- 7.3 The proposals will deliver a net loss of - **0.47 habitat units (- 13.74%)**, and - **0.08 linear units (- 20.55%)**. The trading rules are not satisfied.
- 7.4 Figure 1 shows the headline results for the current proposals.

Figure 1: Headline results of the statutory metric from current proposals

Headline Results		Return to results menu	
Scroll down for final results ▲			
On-site baseline	Habitat units	3.44	
	Hedgerow units	0.40	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	2.96	
	Hedgerow units	0.32	
	Watercourse units	0.00	
On-site net change (units & percentage)	Habitat units	-0.47	-13.74%
	Hedgerow units	-0.08	-20.55%
	Watercourse units	0.00	0.00%
Off-site baseline	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	Habitat units	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-0.47	
	Hedgerow units	-0.08	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	

FINAL RESULTS				
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-0.47		
	Hedgerow units	-0.08		
	Watercourse units	0.00		
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-13.74%		
	Hedgerow units	-20.55%		
	Watercourse units	0.00%		
Trading rules satisfied?		No - Check Trading Summaries ▲		
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	3.44	3.78	0.82
Hedgerow units	10.00%	0.40	0.44	0.12
Watercourse units	10.00%	0.00	0.00	0.00
				No additional watercourse units required to meet target ✓
Input errors/rule breaks present in metric ▲				

Suggested onsite habitat creation and enhancement

7.7 As the current plans would result in a net loss of -13.74% of habitat units and 20.55% of linear units, existing habitat could be created and enhanced on site to achieve a net gain in biodiversity and linear units. This would be undertaken through sensitive habitat management to ensure the stated target conditions would be reached.

Recommended habitat creation and enhancement

7.8 Enhancing 0.2 hectares of on-site modified grassland to moderate condition other neutral grassland would deliver 1.24 habitat units. The following is recommended in order to enhance this habitat:

- Scarification of existing sward
- Overseeding of a wildflower seed mix of local provenance, potentially with the addition of a hemiparasitic species such as yellow-rattle (*Rhinanthus minor*) to aid in reducing soil nutrient levels.
- Ongoing management of the grassland, including cutting and taking off, after seed setting.

7.9 Creating 0.07 kilometres of native hedgerow would deliver 0.14 linear units. Appropriate native species are detailed in table 3.

Table 3: Species to be include in hedgerow planting

Species	Proportion within hedgerow
Field maple (<i>Acer campestre</i>)	10%
Hazel (<i>Corylus avellana</i>)	20%
Hawthorn (<i>Crataegus monogyna</i>)	25%
Spindle (<i>Euonymous europaea</i>)	10%

Species	Proportion within hedgerow
Crab apple (<i>Malus sylvestris</i>)	5%
Blackthorn (<i>Prunus spinosa</i>)	15%
Dog rose (<i>Rosa canina</i>)	5%
Elder (<i>Sambucus nigra</i>)	5%
Gelder-rose (<i>Viburnum opulus</i>)	5%
Pedunculate oak (<i>Quercus robur</i>) for any standard tree planting within the hedgerow.	

7.10 Overall the on-site creation and enhancement of habitats would result in a **net gain of + 0.37 habitat units which equates to + 10.72% and + 0.05 linear units which equates to +13.31%.**

7.11 The trading summary is satisfied based on the above assumptions.

7.12 Figure 2 shows the headline results if the suggested habitat creation and enhancement of was implemented, demonstrating that the sufficient net gain in biodiversity has been met, and trading rules have been satisfied.

Figure 2: Headline results as a result of the recommended on-site habitat creation and enhancement

Headline Results		Return to results menu	
Scroll down for final results 			
On-site baseline	Habitat units	3.44	
	Hedgerow units	0.40	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	3.80	
	Hedgerow units	0.45	
	Watercourse units	0.00	
On-site net change (units & percentage)	Habitat units	0.37	10.72%
	Hedgerow units	0.05	13.31%
	Watercourse units	0.00	0.00%
Off-site baseline	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	Habitat units	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.37	
	Hedgerow units	0.05	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	

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FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.37
	Hedgerow units	0.05
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	10.72%
	Hedgerow units	13.31%
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	3.44	3.78	0.00
Hedgerow units	10.00%	0.40	0.44	0.00
Watercourse units	10.00%	0.00	0.00	0.00

No additional area habitat units required to meet target ✓
No additional hedgerow units required to meet target ✓
No additional watercourse units required to meet target ✓

8.0 CONCLUSION

- 8.1 On-site habitat creation and enhancement has been suggested. Implementing these recommendations would achieve a **net gain of + 0.37 habitat units (10.72%) and + 0.05 linear units (+ 13.21%) with the trading rules being satisfied.**
- 8.2 To ensure that habitats created on-site reach their target condition, a Biodiversity Net Gain Habitat Management and Monitoring Plan (HMMP) will need to be created and implemented. Any proposed habitats and features created (either on-site, or off-site will need to be managed and maintained over a minimum of 30-year aftercare period, in line with the mandatory requirements.

9.0 REFERENCES

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APPENDIX I: SITE LOCATION PLAN



APPENDIX II: BASELINE HABITATS PLAN



APPENDIX III: GOOGLE EARTH IMAGERY

Image 1: Google Earth image of the site May 2020 showing habitats prior to clearance



Image 2: Google Earth image of the site September 2024 showing habitats post clearance



APPENDIX IV: BASELINE HABITAT MAP PRIOR TO CLEARANCE



APPENDIX V: CONDITION ASSESSMENTS

Modified grassland

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UK Habitat Classification (UKHab) Habitat Type			
Grassland - Modified grassland			
Habitat Description			
A large area of modified grassland with a short sward due to regular mowing is located in the north of the site. This habitat is dominated by perennial ryegrass (<i>Lolium perenne</i>). Other species recorded here include abundant amounts of annual meadow grass (<i>Poa annua</i>), frequent amounts of Yorkshire fog (<i>Holcus lanatus</i>), creeping buttercup (<i>Ranunculus repens</i>), clover species (<i>Trifolium sp.</i>), daisy (<i>Bellis perennis</i>), and dandelion (<i>Taraxacum officinale</i>), occasional amounts of smooth cat's ear (<i>Hypochaeris glabra</i>), ragwort (<i>Jacobaea vulgaris</i>), and ribwort plantain (<i>Plantago lanceolata</i>), locally occasional amounts of chickweed (<i>Stellaria media</i>) and vetch species (<i>Vicia sp.</i>), and rare amounts of spear thistle (<i>Cirsium vulgare</i>), and bristly oxtongue (<i>Helminthotheca echinoides</i>). A smaller parcel of modified grassland is located adjacent to the eastern boundary, aligned approximately midway between the northern and southern boundaries. The majority of this area is used to store boat making equipment. The sward here is short. Species recorded here included abundant amounts of ribwort plantain, locally abundant amounts of creeping buttercup and clover species, frequent amounts of hairy bittercress (<i>Cardamine hirsute</i>) and broad-leaved dock (<i>Rumex obtusifolius</i>), locally frequent amounts of scented mayweed (<i>Matricaria chamomilla</i>), occasional amounts of creeping bent (<i>Agrostis stolonifera</i>), and rare amounts of red deadnettle (<i>Lamium purpureum</i>), spear thistle, common nettle (<i>Urtica dioica</i>), spear-leaved willowherb (<i>Epilobium lanceolatum</i>), bristly oxtongue, and bramble (<i>Rubus fruticosus agg.</i>). Two small areas of modified grassland are located in the east of the site. Species recorded here included dominant perennial ryegrass, frequent amounts of daisy and dandelion, and occasional amounts of annual meadow grass.			
ukhab – UK Habitat Classification - - - - -			
On-site or off-site, site name and location	On-site, Ridge Farm, Southampton, Hampshire	Survey date and Surveyor name	04/04/25, Ben Willers
		Survey reference (if relating to a wider survey)	N/A

Limitations (if applicable)	The survey was conducted on 4th April 2025 which is outside of the optimal botanical survey season. However, it was still possible to assess the habitat condition of the modified grassland, as key structural features and dominant species characteristic of this habitat type were readily identifiable at the time of survey.	Habitat parcel reference										
		Modified grassland	Modified grassland	Modified grassland								
		Grid reference										
Condition Assessment Criteria		SU 46760 09629	SU 46772 09544	SU 46688 09559								Notes (such as justification)
		Criterion passed (Yes or No)										
A	There are 6-8 vascular plant species per m² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition. Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m² (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	No	No	No								

B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	No	No	No										
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes	Yes	Yes										
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Yes	No	Yes										
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	No	No	No										

F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Yes	Yes	Yes										
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	Yes	Yes	Yes										
Essential criterion achieved (Yes or No)		No	No	No										
Number of criteria passed		4	3	4										
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved ×/✓												
Passes 6 or 7 criteria including passing essential criterion A	Good (3)	X	X	X										
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)	X	X	X										
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)	✓	✓	✓										
Suggested enhancement interventions to improve condition score														

Footnotes

Footnote 1 – Creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, curled dock *Rumex crispus*, broad-leaved dock *Rumex obtusifolius*, common nettle *Urtica dioica*, creeping buttercup *Ranunculus repens*, greater plantain *Plantago major*, white clover *Trifolium repens* and cow parsley *Anthriscus sylvestris*.

Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.

Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.

Footnote 4 – Wildlife and Countryside Act 1981 (as amended).

Other neutral grassland

Condition Sheet: GRASSLAND Habitat Type (medium, high and very high distinctiveness)			
UK Habitat Classification (UKHab) Habitat Types			
Grassland - Lowland calcareous grassland Grassland - Lowland dry acid grassland Grassland - Lowland meadows Grassland - Other lowland acid grassland Grassland - Other neutral grassland Grassland - Tall herb communities (H6430) [Not to be confused with the Tall forbs secondary code – see UKHab guidance for details.] Grassland - Upland acid grassland Grassland - Upland calcareous grassland Grassland - Upland hay meadows Sparsely vegetated land - Calaminarian grassland			
Habitat Description			
A small ditch is present in the east of the site. Species recorded within this habitat include dominant red deadnettle, frequent amounts of groundsel (<i>Senecio vulgaris</i>), spear-leaved willowherb, and annual meadow grass, occasional amounts of cut-leaved cranesbill (<i>Geranium dissectum</i>), dandelion, and prickly lettuce (<i>Lactuca serriola</i>), and rare amounts of bramble, ragwort, vetch species, smooth sow-thistle (<i>Sonchus oleraceus</i>), cleavers (<i>Galium aparine</i>), common fleabane (<i>Pulicaria dysenterica</i>), Yorkshire fog, wild radish (<i>Raphanus raphanistrum</i>), common sorrel (<i>Rumex acetosa</i>), creeping thistle (<i>Cirsium arvense</i>), thale cress (<i>Arabidopsis thaliana</i>), and petty spurge (<i>Euphorbia peplus</i>). A bund is adjacent to the northern boundary. The bund has been colonized by abundant amounts of perennial ryegrass, annual meadow grass, and Yorkshire fog, locally abundant amounts of ground ivy (<i>Glechoma hederacea</i>), frequent amounts of ragwort, creeping buttercup, groundsel, ribwort plantain, broadleaved dock, and common nettle, occasional amounts of scented mayweed, bristly ox tongue, and spear thistle, and a rare amount of red deadnettle.			
ukhab – UK Habitat Classification - - - - -			
On-site or off-site, site name and location	On-site, Ridge Farm, Southampton, Hampshire	Survey date and Surveyor name	04/04/25, Ben Willers

		Survey reference (if relating to a wider survey)	N/A									
Limitations (if applicable)	The survey was conducted outside of the peak botanical survey season. However, it was possible to assess the habitat condition of the habitat as key structural features and dominant species characteristic of this habitat were identifiable.	Habitat parcel reference										
		Ditch area	Colonised bund									
Condition Assessment Criteria		Grid reference										
		SU 46769 09536	SU 46742 09674									
		Criterion passed (Yes or No)										Notes (such as justification)
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description).¹ Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	No	No									

B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	No	No										
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ² .	Yes	Yes										
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Yes	Yes										

E	Combined cover of species indicative of suboptimal condition³ and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species⁴ (as listed on Schedule 9 of WCA⁵) are present, this criterion is automatically failed.	Yes	Yes											
Additional Criterion - must be assessed for all non-acid grassland types														
F	There are 10 or more vascular plant species per m² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	No	No											
Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)		No	No											
Number of criteria passed		3	3											
Condition Assessment Result	Condition Assessment Score	Score Achieved ×/✓												
Acid grassland types (Result out of 5 criteria)														
Passes 5 criteria	Good (3)													
Passes 3 or 4 criteria	Moderate (2)													

Passes 2 or fewer criteria	Poor (1)																		
Non-acid grassland types (Result out of 6 criteria)																			
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)	X	X																
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)	X	X																
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)	✓	✓																
Suggested enhancement interventions to improve condition score																			
Notes																			

Footnote 1 - Professional judgement should be used alongside the UKHab description.

Footnote 2 – For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches not exceeding 5% cover.

Footnote 3 - Species indicative of suboptimal condition for this habitat type include: creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, curled dock *Rumex crispus*, broad-leaved dock *Rumex obtusifolius*, common nettle *Urtica dioica*, creeping buttercup *Ranunculus repens*, greater plantain *Plantago major*, white clover *Trifolium repens* and cow parsley *Anthriscus sylvestris*. There may be additional relevant species local to the region and or site.

Footnote 4 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, by applying professional judgement.

Footnote 5 – Wildlife and Countryside Act 1981 (as amended).

Individual rural trees

Condition Sheet: INDIVIDUAL TREES Habitat Type			
Habitat Types			
Individual trees – Urban trees Individual trees – Rural trees Complete a condition sheet for each tree or block of trees. <i>Please see the separate Line of trees condition sheet for a line of <u>rural</u> trees. You should only use the Line of trees condition assessment and record that habitat type in <u>rural</u> locations.</i>			
Habitat Description			
A block of three trees are present in the north-west of the site adjacent to the northern boundary. The trees comprise A medium sized ash (<i>Fraxinus excelsior</i>) and two small sized ash.			
Individual trees (description applied to the urban or rural environment): Young trees over 7.5 cm in diameter at breast height whose canopies are not touching. Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only): Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies should predominantly overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.			
On-site or off-site, site name and location	On site, Ridge Farm, Southampton, Hampshire	Survey date and Surveyor name	04/04/25, Ben Willers
Limitations (if applicable)	N/A	Survey reference (if relating to a wider survey)	N/A

Grid reference	SU 46699 09695	Habitat parcel reference	Individual rural trees
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The tree is a native species (or at least 70% within the block are native species).	Yes	Three ash (<i>Fraxinus excelsior</i>) trees
B	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).	Yes	The trees are close to one another creating a continuous canopy
C	The tree is mature (or more than 50% within the block are mature) ¹ .	No	Two of the three trees are not at least two thirds of their fully mature height.
D	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.	Yes	No adverse impacts recorded.
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	No	No ecological niches recorded.
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Yes	>20% is oversailing grassland

Number of criteria passed		4	
Condition Assessment Result (out of 6 criteria)	Condition Assessment Score	Score Achieved ×/✓	
Passes 5 or 6 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	X	
Passes 2 or fewer criteria	Poor (1)		
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.			
Suggested enhancement interventions to improve condition score ²			
Footnotes			
Footnote 1 - See gov.uk standing advice on ancient and veteran trees. Available from: Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk) and: Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk) Footnote 2 - Enhancement of this habitat type is only possible by improving the habitat so that it meets all Criteria B, D and F. It is not possible or appropriate to enhance individual tree/s through meeting just one or two of those Criteria, nor by meeting Criteria A, C or E.			