BNG Habitat Management & Monitoring Plan

Land to the South of Wandleys Lane, Eastergate

Ecosupport Ltd
K4 Keppel,
Daedalus Park,
Lee-on-the-Solent
PO13 9FX

[redacted]

VAT: 228 4314 18

ecosupport

Report	Biodiversity Net Gain Assessment & Habitat Management and Monitoring Plan
Site Name	Land to the South of Wandleys Lane, Eastergate
Author(s)	Grace Roberts MSci (Hons)
Checked By	Darrelle Moffat BES (Hons) PGCert
Client	LandQuest UK (Southern) Ltd
Date of Issue	March 2025
Status	***Final***

Ecosupport Ltd K4 Keppel, Daedalus Park, Daedalus Drive, Lee-on-the-Solent, Hampshire, PO13 9FX

[redacted]

Table of Contents

1.0 INTRODUCTION

1.1 Background

Ecosupport Ltd were commissioned by LandQuest UK (Southern) Ltd to undertake a Biodiversity Net Gain Assessment for a site called 'Land to the South of Wandleys Lane' in Eastergate.

The purpose of the Biodiversity Net Gain (BNG) assessment is to quantify the biodiversity value of the site prior to its development, and the predicted value post development. This is measured in biodiversity units, calculated according to the habitats present based on their size, distinctiveness and condition. This enables the quantitative calculation of the predicted change in biodiversity value as a result of the proposed development, with the objective of achieving a net gain in biodiversity.

This report will also address how habitats will be enhanced and created to achieve a net gain in biodiversity units and how these habitats will be managed and monitored for at least 30 years. The following points will be covered (DEFRA, 2024):

- How off-site gains and / or significant on-site enhancements will be managed, taking into account any legal restrictions and requirements (including additionality),
- When and how habitats will be monitored,
- When and how monitoring results will be reported,
- When and how management proposals will be reviewed,
- How habitats will be restored if the management plan is not working.

1.2 Site Location and Description

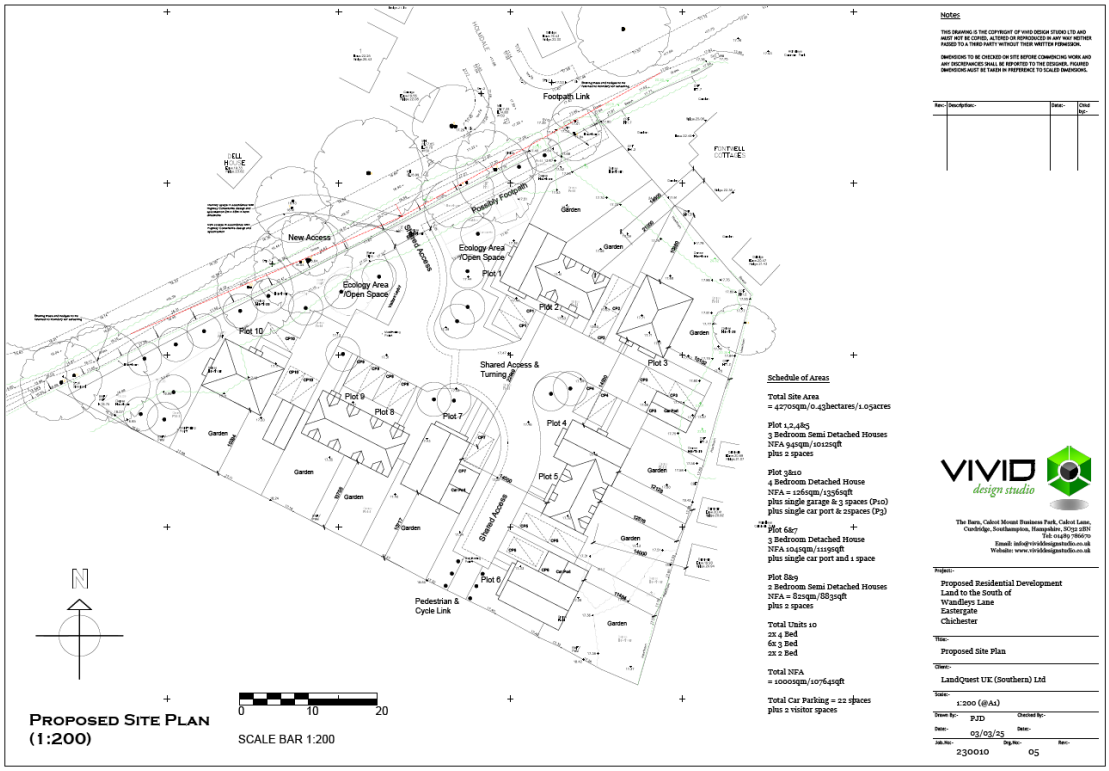
The site comprises of a field used for grazing and associated barn at Land to the South of Wandleys Lane, Eastergate, Chichester, PO20 3SE (centred on OS grid reference SU 94839 06236) (**Fig 1**). The site is bound by Wandleys Lane to the north-west, with a caravan park to the east and fields and residential houses to the south. In the wider environment, the site is situated within a semi-rural environment, to the east of Chichester.

Figure 1. Approximate site boundary (redline) (Google Satellite, 2024).

1.3 Development Proposals

The proposals entail the development of 10 dwellings, with associated gardens, landscaping, and access (**Fig 2**).

Figure 2. Proposed site plan (VIVID Design Studio, Drawing No: 230010_05).



2.0 METHODOLOGY

The methodology for the assessment follows the Natural England Statutory Biodiversity Metric habitat condition assessment protocols and uses the Statutory Biodiversity Metric calculation tool to calculate biodiversity losses and gains (DEFRA, 2024).

2.1 Habitat Assessment

Habitats on site pre-development were identified in accordance with the categories specified for a UK Habitats survey using Habitat Definitions Version 2.0 (UKHab Ltd., 2023). This was chosen as an appropriate habitat categorisation system as it fits within the Statutory Biodiversity Metric calculation. The habitat definitions used were based on those identified during an updated walkover undertaken on the 18th February 2025 by Ecosupport Ltd.

A condition assessment was carried out on site by Darla Brown BSc (Hons), Project Ecologist with Ecosupport on the 12th August 2024. This was carried out in accordance with the Biodiversity Metric 4.0 Technical Annex 1 – Condition Assessment Sheets (Natural England, 2023) as this was the most up to date metric at the time. The condition assessment was later updated in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). The area of identified habitats is calculated in hectares (ha), ignoring linear features or ditches (the area is measured to the centre line of such features). The length of linear features is measured separately in kilometres (km). The dominant habitat type was selected, according to those defined by UKHab Ltd (2023). Where there was disparity between the UK classification for habitat type and those present within the Statutory Biodiversity Metric calculator tool, this was noted within the condition assessment tables.

2.2 Habitat Distinctiveness

Each habitat was assigned a score for distinctiveness, according to the Statutory Biodiversity Metric calculator tool (DEFRA, 2024). This ranged from Poor - High for most habitats, or Not Applicable (e.g. Developed Land – Sealed Surface). Using the tool, habitats were assigned a score based on their distinctiveness.

2.3 Habitat Condition

The condition of each habitat was assessed following criteria set out in the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024), which includes detailed assessment criteria for different habitats. Full results of the condition assessments can be found within **Section 3.0**. The condition of each habitat was assessed individually on site but, where the condition was found to be the same across several parcels, these were grouped together.

2.4 Mitigation Hierarchy

The proposed development has been designed to follow the biodiversity gain hierarchy as described in paragraph 186 (a) of the National Planning Policy Framework (DLUHC) which sets out a list of priority actions when achieving a net gain on site:

- avoiding adverse effects of the development on onsite habitat with a habitat distinctiveness score, applied in the biodiversity metric, equal to or higher than six;
- so far as those adverse effects cannot be avoided, mitigating those effects;

Ecosupport Ltd K4 Keppel, Daedalus Park, Daedalus Drive, Lee-on-the-Solent, Hampshire, PO13 9FX
T: 01329 832841 info@ecosupport.co.uk www.ecosupport.co.uk

- so far as those adverse effects cannot be mitigated, habitat enhancement of onsite habitat;
- so far as there cannot be that enhancement, creation of onsite habitat;
- so far as there cannot be that creation, the availability of registered offsite biodiversity gain;
- so far as that offsite habitat enhancement cannot be secured, purchasing biodiversity credits.

2.5 Limitations

It is not considered there were any limitations at the time of any of the survey. The walkover was undertaken at a suitable time of year for identifying botanical species and all surveys followed the relevant best practice guidelines, with all areas of the site accessible. This survey does not constitute a full site assessment for invasive species, such as Japanese Knotweed (*Fallopia japonica*).

3.0 EXISTING HABITATS AND DEVELOPMENT PROPOSALS

Sections 3.1 & 3.2 provides tables outlining the Condition Assessment undertaken with reference to the Statutory Biodiversity Metric Condition Assessment Supplement (Natural England, 2024). For these assessments, the current habitats on site were categorised according to UK Hab (2023) classifications.

3.1 Baseline Non-linear Habitats

The following non-linear habitats were found on site, as shown within the appended plan:

- g4 - Modified Grassland
- u1b5 - Buildings

NB. The only non-linear habitat type which was subject to a condition assessment was the area of Modified Grassland as Buildings do not require a condition assessment as they have a predetermined condition of 'N/A Other' or 'Condition Assessment N/A' under current guidance within The Statutory Biodiversity Metric.

The following table outlines the Condition Assessment undertaken on the 12th August 2024.

3.1.1 g4 - Modified Grassland

The grassland on site, was identified as Modified Grassland due to the species present supporting a forb density of consistently < 6 species / m^2 (**Fig 3**). The grassland was noted to comprise of Hoary Willowherb (*Epilobium parviflorum*), Oxeye Daisy (*Leucanthemum vulgare*), Ragwort (*Senecio jacobaea*), Yarrow (*Achillea millefolium*), Ground ivy (Glechoma hederacea), Ribwort Plantain (*Plantago lanceolata*), White Dead Nettle (*Lamium album*), Nettle (*Urtica dioica*), Creeping Thistle (*Cirsium arvense*), and Scarlet Pimpernel (*Anagallis arvensis*).

The grassland was noted to fail criterion A due to there being <6 vascular plant species present per m^2 and criterion B due to a non-varied sward height. As such, the modified grassland was considered to be of **poor condition** (**Table 1**).

Figure 3. View of the g4 Modified Grassland forming the majority of the site (taken August, 2024).

Table 1. Condition assessment of the Modified Grassland on site.

Map location	g4 modified grassland
Area	0.402 ha
Distinctiveness	Low
UK Hab Habitat Type	g4 – Modified grassland
Condition	

Item	Condition Assessment Criteria	Pass/Fail
A	There must be 6-8 species per m^2. If a grassland has 9 or more species per m2 it should be classified as a medium distinctiveness grassland habitat type. **NB - this criterion is essential for achieving moderate or good condition.**	Fail
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.	Fail
C	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Pass
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.	Pass

Ecosupport Ltd K4 Keppel, Daedalus Park, Daedalus Drive, Lee-on-the-Solent, Hampshire, PO13 9FX
T: 01329 832841 info@ecosupport.co.uk www.ecosupport.co.uk

E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	Pass
F	Cover of bracken is less than 20%.	Pass
G	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Pass

[ ] Good condition (3): Passes 6 or 7 of 7 criteria including passing essential criterion 1

[ ] Moderate condition (2): Passes 4 or 5 of 7 criteria including passing essential criterion 1

[X] **Poor condition (1): Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria (but failing criterion 1)**

3.2 Baseline Linear Habitats

The following linear habitats were found on site, as shown in within the appended plan:

- Line of Trees – w1f secondary habitat code 33
- h2a – Native Hedgerow

The following tables outlines the Condition Assessment undertaken on the 12th August 2024.

3.2.1 Line of Trees (w1f – secondary habitat code 33)

The line of trees is present along the north-western site boundary (**Fig 4**). Species noted comprised of Hawthorn (*Crataegus monogyna*), Pedunculate Oak (*Quercus robur*), and Sycamore *(Acer pseudoplantanus)*. It was noted to fail criterion D due to disturbed land present on both sides of the line of trees (road and farming) and criterion E due to damage being present on the trees from farming and livestock practices. As such, the line of trees was considered to be of **moderate condition** (**Table 2**).

Figure 4. View of the line of trees on the north-western boundary of the site (taken August, 2024).

Table 2. Condition assessment of the Line of Trees on site.

Map location	Along the north-western boundary
Length	0.085 km
Distinctiveness	Low
UK Hab Habitat Type	Lowland Mixed Deciduous Woodland (w1f) comprised of a line of trees (secondary habitat code 33)
Condition	

Item	Condition Assessment Criteria	Pass/Fail
A	At least 70% of trees are native species.	Pass
B	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.	Pass
C	One or more trees has veteran features and or natural ecological niches for vertebrates and invertebrates, such as presence of standing and attached deadwood, cavities, ivy or loose bark.	Pass
D	There is an undisturbed naturally-vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other human activities (excluding grazing). Where veteran trees are present, root protection areas should follow standing advice.	Fail
E	At least 95% of the trees are in a healthy condition (deadwood or veteran features valuable for wildlife are excluded from this). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Fail

☐ Good condition (3): Passes 5 criteria

	X **Moderate condition (2): Passes 3 or 4 criteria** Poor condition (1): Passes 2 or fewer criteria

3.2.2 Native Hedgerow (h2a)

The next linear habitat present on site is native hedgerow (h2a), as shown within the appended plan, located along the eastern boundary of the site (**Fig 5**). At the time of the walkover survey, species noted comprised of Hawthorn (*Crataegus monogyna*), Bramble (*Rubus fruticosus*), Blackthorn (*Prunus spinosa*), Spindletree (*Euonymus europaeus*), and Beech (*Fagus sylvatica*).

The native hedgerow was noted to fail criterion C1 due to the presence of disturbance on the ground/perennial vegetation, criterion C2 due to the presence nutrient rich perennial species present covering >20% of undisturbed ground, and criterion D2 due to damage present on the hedgerow due to excessive management.

As the hedgerow was noted to fail three criteria the native hedgerow was considered to be of **moderate condition** (**Table 3**).

Figure 5. The native hedgerow at the east of the site (taken August, 2024).

Table 3. Condition assessment of the native hedgerow on site.

Map location	Along the eastern boundary
Length	0.033 km
Distinctiveness	Medium

<table>
<tr><td>UK Hab Habitat Type</td><td colspan="4">Native Hedgerow (h2a)</td></tr>
<tr><td>Condition</td><td colspan="4">
<table>
<tr><th colspan="2">Attributes and functional groupings</th><th>Criteria</th><th>Criteria description</th><th>Pass/Fail</th></tr>
<tr><td>A1</td><td>Height</td><td>>1.5 m average along length</td><td>The average height of woody growth estimated from base of stem to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees.

Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).

A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).</td><td>Pass</td></tr>
<tr><td>A2</td><td>Width</td><td>>1.5 m average along length</td><td>The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees.

Outgrowths (such as blackthorn Prunus spinosa suckers) are only included in the width estimate when they are >0.5 m in height.

Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).</td><td>Pass</td></tr>
<tr><td>B1</td><td>Gap - hedge base</td><td>Gap between ground and base of canopy <0.5 m for >90% of length</td><td>This is the vertical ‘gappiness’ of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth.</td><td>Pass</td></tr>
</table>
</td></tr>
</table>

				Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	
	B2	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).	Pass
	C1	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: · Measured from outer edge of hedgerow; and · Is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	Fail
	C2	Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles *Urtica* spp., cleavers *Galium aparine* and docks *Rumex* spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	Fail
	D1	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes).	Pass

[redacted]

			invasive non-native plant species (including those listed on Schedule 9 of WCA[3]) and recently introduced species.	Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website[4], as well as the BSBI website[5] where the 'Online Atlas of the British and Irish Flora'[6] contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website[7].	
D2	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).	Fail	

[ ] Good condition (3): No more than 2 failures in total; AND no more than 1 failure in any functional group.

[X] **Moderate condition (2): No more than 4 failures in total; AND <u>does not fail both attributes</u> in more than one functional group (for examples, fails attributes A1, A2, B1 and C2 = Moderate condition).**

[ ] Poor condition (1): Fails a total of more than 4 attributes OR <u>fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).

4.0 PROPOSED CREATED HABITATS & NET GAIN ASSESSMENT

4.1 On Site

Following a consultation with LandQuest UK (Southern) Ltd, in order to achieve a 10% gain on-site, the following habitats are being enhanced and created as set out within **Sections 4.1.1 & 4.1.2** (please refer to the landscape areas plan appended for information on the locations of these habitats on site). Tables have been provided as appropriate to indicate the targeted condition for each of the habitat types and which criteria will need to be met in order to achieve the desired condition within **Section 4.1.3**.

4.1.1 Non-Linear Habitats

Habitat Enhancement

- Other Neutral Grassland - 0.064 ha of 'moderate' condition modified grassland to be enhanced to 'moderate' condition other neutral grassland.

Habitat Creation

- Individual Urban Trees – 20 Individual Urban Trees categorised as 'small' will be planted across the areas of grassland throughout the site which was measured at 0.0814 ha using the 'Urban Tree Helper' within the Statutory Biodiversity Metric.
- New areas of Developed Land; Sealed Surface, Buildings, and Vegetated Garden will also be created throughout the site; however, these have a predetermined condition of 'N/A – Other', and 'Condition Assessment N/A' under current guidance within the Statutory Metric. These habitats have a pre-determined distinctiveness of 'Very Low'.

4.1.2 Linear Habitats

Habitat Retention

- Native Hedgerow – 0.033 km of Native Hedgerow at the east of the site to be retained in its current 'moderate' condition.
- Line of Trees – 0.079 km of Line of Trees on the western boundary to be retained in its current 'moderate' condition.

Habitat Creation

- Species-rich Native Hedgerow – 0.019km of Species-rich Native Hedgerow along the southern site boundary will be created of 'poor' condition, to compensate for the small loss of trees for the new access road.

4.1.3 Post Development Condition Assessments

The following tables (**Table 4 & Table 5**) outline the condition assessments for the created and enhanced non-linear and linear habitats proposed, post-development.

Table 4. Non-linear habitats to be enhanced and created on site including details as to the condition assessment criteria that must be met in order to achieve the targeted condition (the necessary planting and management required to achieve the stated condition criteria is detailed in **Section 5.0**).

Habitat Type	Action	Area (ha)	Target Condition	Condition Assessment Notes	Parcel Reference - Location Notes
Other Neutral Grassland	Enhanced	0.064	Moderate	An existing section of modified grassland will be enhanced to moderate condition other neutral grassland in line with the Statutory Biodiversity Metric Condition Assessments (DEFRA, 2024). Specifically, Criteria A, C, and D will be targeted for achievement with sowing of an appropriate seed mix and appropriate management to encourage species diversity while minimising bare ground, scrub and bracken cover.	ONG1 and ONG2 - along the north-western boundary in an ecology area.
Individual (urban) Trees	Created	0.0814	Moderate	20 individual trees of moderate condition will be created in line with the Statutory Biodiversity Metric Condition Assessments (DEFRA, 2024). Specifically, Criteria A, B, and D will be targeted for achievement with native trees to be planted and appropriate management implemented to prevent adverse impacts to health and maintain a continuous canopy.	20 no individual urban scattered trees proposed within grassland.
Developed Land; Sealed Surface	Created	0.103	N/A – Other	No condition assessment is required as per The Statutory Biodiversity Metric calculation tool (DEFRA, 2024).	N/A – Located throughout the site (roads, driveways etc.).
Developed Land; Sealed Surface	Created	0.066	N/A – Other	No condition assessment is required as per The Statutory Biodiversity Metric calculation tool (DEFRA, 2024).	N/A – Constructed buildings within the development site.
Vegetated Gardens	Created	0.172	Condition Assessment N/A	No condition assessment is required as per The Statutory Biodiversity Metric calculation tool (DEFRA, 2024).	N/A – Gardens created on site.

Table 5. Linear habitats to be created on site including details as to the condition assessment criteria that must be met in order to achieve the targeted condition (the necessary planting and management required to achieve the stated condition criteria is detailed in **Section 5.0**).

Habitat Type	Action	Length (km)	Target Condition	Condition Assessment Notes	Parcel Reference - Location Notes
Native Hedgerow	Retained	0.033	Moderate	Native Hedgerow will be retained in its current moderate condition in line with the Statutory Biodiversity Metric Condition Assessments (DEFRA, 2024). Criteria A1, A2, B1, B2, and D1 will be targeted for achievement with management implemented to retain current height and width, maintain fullness (infill any areas of gappiness that may occur), and to remove any invasive species if they start to grow.	H1 - along north-eastern boundary
Line of Trees	Retained	0.079	Moderate	Line of trees to be retained in its current moderate condition in line with the Statutory Biodiversity Metric Condition Assessments (DEFRA, 2024). Current management will continue to reach Criteria A, B, and C, by retaining native trees, canopy cover, and ecological niches.	H2 – along north-western boundary (beside road)
Species-rich Native Hedgerow	Created	0.019	Poor	Species-rich Native Hedgerow will be created targeting poor condition in line with the Statutory Biodiversity Metric Condition Assessments (DEFRA, 2024). Although the target condition aim is listed as poor, higher criteria will be aimed to be met and Criterion B1, B2, and D1 will be targeted for achievement with management implemented to infill any gappy areas with native planting and removal/control of invasive species.	H3 - along southern boundary

[redacted]

4.2 Metric Calculations

Following the incorporation of the above measures into the Statutory Defra metric, ***on site there is a net gain of +21.61% (or +0.17 habitat units) in habitats*** on site and ***a net gain of +10.45% or (+0.05 hedgerow units)***, and ***the trading rules are satisfied*** (see **Fig 6** below).

Therefore, no additional measures are required in regard to achieving a biodiversity net gain on site.

Figure 6. Screenshot of the 'headline results' output from the BNG assessment undertaken for the site using the Defra Statutory metric following the off-site incorporation.

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.17
	Hedgerow units	0.05
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	21.61%
	Hedgerow units	10.45%
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

4.3 Mitigation Hierarchy

The proposed habitat retention, enhancement and creation described in the above sections follows the Biodiversity Gain Hierarchy as detailed within paragraph 186 (a) of the National Planning Policy Framework (DLUHC, 2023). The below sections cover each of the elements of the hierarchy and how we have sought to address them in this scheme (as there is a need for off site credits):

- **Avoid:** The habitats of highest value have, where possible, been retained, and will be enhanced and restored as necessary. This includes the retention of the linear features on site as well as the enhancement in areas of modified grassland to other neutral grassland. Further habitats could not be retained, due to the quantum of residential development that the site needed to deliver. Not achieving the number of residential units would have rendered the development unviable and prejudiced the Local Authority's ability to deliver much needed housing in the area.

- **Mitigate:** In order to mitigate the loss of modified grassland, an area of other neutral grassland will be enhanced which will have an improved condition and diversity to the previous modified grassland. The loss of a section of the line of trees on site will be mitigated for through creation of a native hedgerow along the southern boundary. Furthermore, extensive tree planting has been proposed outside of private curtilage throughout the site.

- **Offset:** It has been possible to achieve a 10% net gain for biodiversity on site and, as outlined above, the Biodiversity Gain Hierarchy has been followed when addressing the BNG requirements for the site.

5.0 HABITAT MANAGEMENT

5.1 Protection of Retained Habitats

All the existing boundary vegetation and grassland to be retained/enhanced will be protected from damage during the works. These will be fenced using Heras fencing or similar to prevent access by machinery. Where large mature trees are present, they will be protected using standard arboricultural tree protection measures which include protection of the canopy and prevents root compaction.

This will also provide protection for wildlife species that may be using the margins of the site. No vehicles will enter the protective ring fencing and no materials will be stored within their circumference. All protective fencing must be in place prior to any construction machinery arriving on site, before any works on site get underway, and will remain in place until all work is completed. This will minimise the level of disturbance within the boundary habitat / buffer areas during the works and ensure the habitats and any wildlife species that may be using them are protected.

5.2 Other Neutral Grassland

5.2.1 Proposed Planting

The existing modified grassland on-site is to be enhanced into Other Neutral Grassland through the sowing of a wildflower mixture such as Emorsgate EM5 – Meadow Mixture for Loamy Soils or sourcing a local grassland donor from a nearby site. Recommended species, as included within this seed mix include Yarrow (*Achillea Millefolium*), Agrimony (*Agrimonia eupatoria*), Betony (*Betonica officinalis*), Common Knapweed (*Centaurea nigra*), Wild Carrot (*Daucus carota*), Lady's Bedstraw (*Galium verum*), Field Scabious (*Knautia arvensis*), Rough Hawkbit (*Leontodon hispidus*), Oxeye Daisy (*Leucanthemum vulgare*), Birdsfoot Trefoil (*Lotus corniculatus*), Musk Mallow (*Malva moschata*), Ribwort Plantain (*Plantago lanceolata*), Salad Burnet (*Poterium sanguisorba*), Cowslip (*Primula versis*), Meadow Buttercup (*Ranunculus acris*), Bulbous Buttercup (*Ranunculus bulbosus*), Common Sorrel (*Rumex acetosa*), Bladder Campion (*Silene vulgaris*), Tufted Vetch (*Vicia cracca*), Sweet Vernal-grass (*Anthoxanthum odoratum*), Quaking Grass (*Briza media*), Crested Dogstail (*Cynosurus cristatus*), Red Fescue (*Festuca rubra*), Common Bent (*Agrostis capillaris*), and Yellow Oat-grass (*Trisetum flavescens*).

5.2.2 Management

Wildflower areas do not require any additional watering or fertilizer. Cutting a meadow and removing the clippings retains low nutrient levels in the soil and suppresses coarse grasses which would otherwise out-compete the wildflowers. It is recommended the wildflower grassland undergoes two annual cuts. The growth should be cut back to a height of 150mm. The cut grass should be dried on site. Cuttings should be left in situ for approximately one week, after this the arisings are to be removed from site. Should any areas of ground become bare or damaged, additional planting will occur within the next planting season.

First year management: Perennial species take at least a full year to establish. For newly sown areas the first summer will be dominated by annual weeds arising from the soil seed bank and by grass growth. This should be controlled by mowing throughout the first year to minimise competition and weed seed production.

Management Once Established: During the second year it is recommended that the wildflower areas are left to flower and will be cut in mid-summer. However, this should not be cut in May or early June due to nesting birds. Mowing in mid-June brings a premature end to the flowers and can compromise nesting birds, which do not fledge until late July, insects and other wildlife. If some mowing has to take place at this time, sections should be cut at different dates to prolong the overall flowering season and give wildlife a chance to move. The second annual cut should be undertaken during late Autumn. Grassland which is consistently cut late in the season, in August and September, year on year reduces species diversity as late cutting gives more time for coarse grasses and other dominant plants to grow unchecked. To maintain maximum diversity and flowering interest the development buffers should be managed in sections at different times from late June to the end of August. Varying the mowing times from year to year is the best way to maintain a diverse balanced sward.

Targeted scrub and bracken removal should also be carried out as needed to prevent excessive encroachment into the grassland.

5.3 Individual (Urban) Trees

5.3.1 Proposed Planting

A total of 20 No. trees will be planted across the site. Recommended species planting includes Alder (*Alnus glutinosa*), Beech (*Fagus sylvatica*), Hazel *(Corylus avellana)*, Oak (*Quercus robur*), Wild Cherry (*Prunus avium*), Crab Apple (*Malus sylvestris*), Elder (*Sambucus nigra*), Field Maple (*Acer campestre*), or Small-leaved Lime (*Tilia cordata*). Weeding will be undertaken around the base of the trees in all years. Trees that are fruiting will not be cut to ensure the formation of fruiting bodies.

Planting will be carried out in the first year. The best time to plant is late autumn and it is recommended to avoid freezing temperatures or heat. Rootgrow or Bonemeal will be applied to the new plants to encourage healthy root growth.

5.3.2 Management

5.3.2.1 Mycorrhizal Treatment

To ensure a successful establishment of the newly planted trees, it is recommended that mycorrhizal treatment to the tree roots is conducted **during the planting**, this would reduce the risk of tree mortality and increase the long-term tolerance of these trees to periods of drought or adverse soil conditions thus ensuring a higher chance of successful long-term establishment.

5.3.2.2 Weed Management

All newly planted trees must have a 1-metre exclusion zone whereby weeds are routinely and pro-actively removed for the **first 2 – 3 years**. Bark mulch is recommended around each tree and will act as an effective management method to also supress weed colonisation.

5.3.2.3 Pruning

The trees will be subject to light pruning as required in October to ensure that they are developing healthy growth forms (but pruning will not be extensive enough to restrict expected canopy or height for their species).

5.3.2.4 Monitoring and Replacement

Trees will be inspected every 3 years by a suitably experienced arborist **during late winter – early spring of each year when required**. These monitoring visits will assess the general health of the trees and determine if any remedial action is required, including noting any presence of disease. As part of these monitoring visits, the arborist will produce a monitoring report which will be sent to the LPA outlining the results and appropriate recommendations (i.e. remedial works, removal /replacement). Any plants that are removed, die or become seriously damaged or defective shall be replaced like for like in the next planting season.

NB. Retained line of trees will follow the same management strategy as proposed to maintain its current condition.

5.4 Species-rich Native Hedgerow

5.4.1 Recommended Planting

Native hedgerow will be planted along the southern boundary of the site to ensure the site results in a net gain in hedgerow units. A minimum of 5 species are to be planted, species to be considered comprise of:

- Hawthorn (*Crataegus monogyna*),
- Hazel (*Corylus avellana*)
- Hornbeam (*Carpinus betulus*)
- Holly (*Ilex aquifolium*)
- Guelder Rose (*Viburnum opulus*)
- Alder Buckthorn (*Frangula alnus*),
- Wild Cherry (*Prunus avium*),
- Crab Apple (*Malus sylvestris*),
- Elder (*Sambucus nigra*),
- Dogwood (*Cornus sanguinea*),
- Privet (*Ligustrum vulgare*),
- Dog Rose (*Rosa canina*).

5.4.2 Management

To enable a successful outcome, the hedgerow will require ongoing management works. This will include monitoring, prescriptive tasks and implementation of necessary works. Elements of this future management are detailed below. The Hedgerow Management and Wildlife (Barr et al., undated) document outlines three important factors in how hedgerows are managed that affect resident mammal population (and have therefore formed the basis of the recommendations in this section):

1. The type and amount of food available within the hedgerow. Favourable conditions being a large invertebrate population or prolific annual seed and berry crop.
2. The vegetation structure and composition of the hedgerow. For instance, a dense, herb- rich basal layer or a continuous line of hedgerow trees is preferred by several species.

3. The continuity and connectivity of the hedge within the landscape. For instance, a hedgerow that connects patches of small farm woodlands will have greater value as a corridor for the dispersal of mammals.

5.4.3 Hedge Trimming Regime

The more favourable approach to managing hedgerows for the benefits of wildlife is to encourage minimal interference and ensure when there is any cutting, it does so after autumn fruiting (so late winter is preferable). While the target condition is Poor and therefore not required to meet particular targets of condition, recommended management is as follows (adopting recommendations as outlined within Bright and MacPherson 2002):

- Cutting will be done on a 3-year cycle (part of the hedges on site cut during the first year, another part of the hedges cut during second year and no cutting during the third year), to provide sustained foraging opportunities across the site every active season. Hedgerows will be allowed to develop into a tall, dense, bushy structures and maintained at a height of 3 – (preferably 4) meters.
- Not all hedgerows should be cut in any one year, so some heavy fruiting hedges are always present.
- Flails should not be used if possible meaning management works will likely involve cutting using hand tools
- Coppicing or laying should be used to manage an of the hedgerows on site which become gappy or sparse
- If the size of the hedgerow needs to be reduced, avoid cutting the top and cut one side.

5.4.4 Monitoring & Replacement

Annual monitoring will take place of the newly planted hedgerows for the first 5 years, followed by every 5 years between 5-30 years (in line with required monitoring in Section 5.6). This will be carried out by a suitably experienced ecologist during late winter – early spring of each year. These monitoring visits will assess the general health of the hedges and determine if any remedial action is required.

Any plants that are removed, die or become seriously damaged or defective during the monitoring period of planting shall be replaced like for like in the next planting season (or infilled through the use of hedge laying).

If hedgerows become very thin, coppicing of selected plants / laying of short lengths of hedgerow may be required and will be beneficial to promote vigorous, dense regrowth. Such works must be undertaken during the period October – February to avoid the breeding bird season.

NB. Retained hedgerows will follow the same management scheme as proposed in section 5.4.2 onwards to maintain its current condition.

5.5 Compliance Check

A compliance visit will be completed by a suitably qualified ecologist once the construction phase of the development has been completed. The check will be conducted annually for the first 5 years post-completion, and every 5-years thereafter until year 30. The compliance check will be carried out

during a suitable time of year and in suitable weather conditions. The ecologist will check all biodiversity ecological enhancements set out to assess if they have been completed and make an assessment if any recommended changes are required to management.

On completion of the visit, a Biodiversity Net Gain (BNG) monitoring report will be compiled, including the following:

- Assessment of habitats against the objectives defined in this management plan
- Any presence of target species noted during the compliance check
- Date stamped photographic evidence taken from fixed monitoring points, of which will be the central point of each land parcel per habitat type as listed in **Section 4.0,** during the first compliance check after the construction phase
- Detailed site notes including a condition assessment for each habitat type listed in **Section 4.0** using the condition criteria within the Technical Supplement (Natural England, 2023).
    - The layout for these notes should use the Condition Assessment Proforma (Natural England 2023) (**Figure 7**)
- Detailed specific recommendations on management actions to promote growth and establishment of target species / habitats including timescales for undertaking actions (if required) and marked site plans to show the actions
- Management of the above recommended actions must be carried out in the next phase and report of any details
- Each BNG monitoring report will be sent to the LPA

Figure 7. Condition Assessment Proforma (Natural England 2021) to be used during each compliance check for each habitat type.

ANNEX 2: CONDITION ASSESSMENT PROFORMA

CONDITION ASSESSMENT PROFORMA FOR USE WITH BIODIVERSITY METRIC 3.0 - AREA BASED HABITATS														
Date							Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)							
Weather conditions														
Surveyor name(s)							Unique polygon reference(s)							
Project / development name							Metric 3.0 habitat type							
Site name or location							Condition assessment required? (y/n)							
Onsite or offsite?							Condition sheet used							
Reason for assessment (if not baseline condition survey)														
Limitations (if applicable)														
Habitat description														
Allocate pass 'P' or fail 'F'. Allocate 'NA' to any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria. For Woodland & Intertidal condition sheets, allocate scores of '1' '2' or '3' against each criterion assessed.														
Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	**TOTAL**
Result														
Photo ref														
Target note ref														
Are any criteria non-negotiable? (Y/N) If Yes are they passed?							Condition (Good/Moderate/Poor):							
Suggested enhancement interventions to improve condition score														

[redacted]

5.6 Safeguarding

The developer and project manager will be responsible for briefing all site personnel of the ecological sensitivities of the site and implementing the mitigation measures outlined within **Section 5.1**. If any protected species are encountered during the construction works, it will be the responsibility of the project manager to cease works and immediately contact an ecologist for advice.

5.7 Post-Construction Habitat Creation

Table 6 below depicts the indicative timings associated with the habitat creation and enhancements to be undertaken after all construction works on site have been completed. This is considered to be year 1 of the management plan. For those activities that can be undertaken at any time of year, the earliest possible time is recommended. Each area will be created at different times due to the phased nature of the project.

5.8 Management Responsibilities

The developer will assume responsibility for the management and maintenance of the newly created and enhanced habitats. When required, responsibility will include ensuring all management works are completed and qualified ecologists, arborists or landscape managers are contracted, etc. Upon the transfer of land, the new landlords shall bear responsibility for the management and maintenance of habitats within their curtilage. All management works as described above will need to be secured by a Section 106 agreement for the site that will legally oblige the developer or other agreed party to carry out the works. An annual management timeline of all habitats has been provided in **Table 7** and management works should continue in perpetuity.

A formal review process will be implemented when objectives and management recommendations are not reached / roles and responsibilities are not fulfilled as agreed. The details of this formal review process are as below:

- A suitably qualified ecologist will visit the site to conduct the compliance check (detailed in **Section 5.5**).
- The compliance check will include the write up and submission of a BNG monitoring report
- The ecologist will review the success for BNG that the previous recommendations or management actions have for the target species / habitats
- The project manager is contacted by the ecologist and is informed of the recommendations or management actions which have not been fulfilled to identify what or who is responsible
- The BNG monitoring report will include a section addressing any raised issues identified during the compliance check
- The BNG monitoring report is submitted to the LPA for review and comment

Table 6. Schedule of habitat retention, enhancement and creation works to be carried out in first year (as per **Sections 4.0 and 5.0**).

General Activity	Specific Activity	Dates / Timing	Description
Habitat Retention Boundary vegetation and grassland (**Section 5.1**)	Installation of fence for protection	Anytime – pre-commencement of works	● Protective fences will be installed around the retained habitats to prevent them from damage during works.
Habitat Enhancement Other Neutral Grassland **(Sections 4.1.1 & 5.2)**	Enhancement of grassland	Ideally Autumn or Spring	● The area of wildflower meadow is to be established through the sowing of a species-rich wildflower mixture or sourcing a local grassland donor from a nearby site
	Year 1 Management	Every 3-4 weeks during the growing season	● During the first year the landscaped areas must be regularly maintained to a height of 40-60mm every 3-4 weeks (or more frequently as needed) during the growing season to prevent the establishment of weeds. All arisings must be taken from site to prevent the addition of too many nutrients into the soil. If necessary, glyphosate-based weed killer can be used to spot treat any areas with dense patches of Nettles or Bramble. ● Should any patches of bare ground occur, additional sowing may be required.
Habitat Creation Individual (urban) trees **(Sections 4.1.1 & 5.3)**	Planting	Late Autumn ideally, in suitable weather	● Plant a mix of native and non-native tree species. ● Apply Rootgrow or Bonemeal to encourage healthy root growth. ● Apply Mycorrhizal treatment to the tree roots.
	Year 1 Management	Anytime	● Remove weeds from a 1m exclusion zone around each newly planted tree. ● Apply mulch around the base of the tree as required.
Habitat Creation Species-rich Native Hedgerow	Planting	Late Autumn ideally, in suitable weather	● A minimum of 5 native species will be planted (with species recommendations in **Section 5.4.1**).

(**Sections 4.1.2 & 5.4**)	Year 1 Management – Hedgerow	Winter i.e. October - February (outside of bird nesting season)	● Weed around newly planted hedge as necessary. ● Water whenever necessary during the first growing season. ● Recommended to begin 3 year cutting cycle in which a portion of the hedges on site are cut in the first year, another portion in the second year and no cutting in the third year. ● Use hand tools and avoid the use of flails.

5.9 Years 2 – 30 Management / Monitoring Table

Once the initial works covering the first year of management / monitoring have been completed as outlined in **Table 6**, the longer-term management objectives for the ecological features on site will need to be implemented (which have been outlined in detail in the above sections). **Table 7** below provides an overview of the actions required and the timings of when they should be complete (covering years 2– 30 post construction).

Table 7. Schedule of monitoring and management in Years 2 – 30 for all habitats (as per **Sections 4.0 and 5.0**).

General Activity	Specific Activity	Dates / Timing	Description
Other Neutral Grassland (**Sections 4.1.1 & 5.2**)	Two annual cuts	1: Spring cut or left to flower until mid-Summer 2: Late autumn	• The growth should be cut back to a height of 150mm. The cut grass should be dried on site. • Cuttings should be left in situ for approximately one week, after this the arisings are to be removed from site. • From the second year onwards the wildflower areas can undergo a spring cut in April to "expedite nutrient depletion and promote wildflower development" (EPR 2021a), or left to flower and cut in mid-Summer • The second annual cut is to be undertaken during late Autumn • Scattered scrub should be maintained to a total site coverage not exceeding 20% of the total area of the site and in blocks not exceeding 10 x 10m to maintain the site's current habitat status • Similarly, should any patches of bare ground occur, replacement planting will be required.
Individual (urban) trees (and retained Line of Trees) (**Sections 4.1.1 & 5.3**)	Weed management	Routinely as required	• Remove weeds from a 1m area around the base of the trees for the first 2-3 years.
	Pruning	October	• The trees will be subject to light pruning as required in October to ensure that they are developing healthy growth forms
	Monitoring	Every 3 years, late Winter – early Spring	• Trees will be inspected by a suitably experienced arborist. • General health will be assessed with remedial action recommended as necessary. • Arborist will produce a monitoring report to be sent to the LPA. • Any plants that are removed, die or become seriously damaged shall be replaced like-for-like in the next planting season.
Species-rich Native Hedgerow (**Sections 4.1.2 & 5.4**)	Yearly monitoring	Anytime	• Annual monitoring will take place of the newly enhanced native hedge areas for the first 3 years
	Replacement planting	Late Autumn ideally, in suitable weather	• Any plants that are removed, die or become seriously damaged or defective during the 30-year monitoring period of planting shall be replaced like for like in the next planting season.

Ecosupport Ltd K4 Keppel, Daedalus Park, Daedalus Drive, Lee-on-the-Solent, Hampshire, PO13 9FX
T: 01329 832841 info@ecosupport.co.uk www.ecosupport.co.uk

	Coppicing	October – February	● If hedgerows become very thin, coppicing of selected plants / laying of short lengths of hedgerow may be required and will be beneficial to promote vigorous, dense regrowth. ● Such works must be undertaken during the period October – February to avoid the breeding bird season.
	Management	Hedgerow trimming regime	● Cutting will be done on a 3-year cycle (part of the hedges on site cut during the first year, another part of the hedges cut during second year and no cutting during the third year ● Hedgerows / scrub will be allowed to develop into a tall, dense, bushy structures and ideally maintained at an ideal height of 3 –4 metres ● Not all hedgerows should be cut in any one year, so some heavy fruiting hedges are always present.
Compliance Check (**Section 5.5**)	Monitoring report	Annually for the first 5 years, then every 5 years until year 30 Must be conducted during a suitable time of year and weather conditions	● A report will be produced by an ecologist to provide details on all management, assessment of habitats, additional management requirements (if required), management to be carried out in the next phase and reporting on any delays ● Each report will be sent to the LPA

[redacted]

6.0 REFERENCES

DEFRA (2024) *Creating a habitat management and monitoring plan for biodiversity net gain.* Available at: https://www.gov.uk/guidance/creating-a-habitat-management-and-monitoring-plan-for-biodiversity-net-gain

DEFRA (2024) *The Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology.* July 2024 (v1.0.2).

DEFRA (2024) *Statutory Biodiversity Metric Tools and Guides.* Available at: https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides

DLUHC (2024) National Planning Policy Framework. Available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2

Ecosupport (2024*). Preliminary Ecological Appraisal Report. Land to the South of Wandleys Lane* (Issued August, 2024).

Emorsgate Seeds (2024). *EM5 – Meadow Mixture For Loamy Soils* Available at: https://wildseed.co.uk/product/mixtures/complete-mixtures/meadow-mixtures-for-specific-soils/meadow-mixture-for-loamy-soils/

Natural England (2023) *BNG Habitat Monitoring Report Template.* Available at: https://publications.naturalengland.org.uk/publication/5813530037846016

Natural England (2024). *Statutory Biodiversity Metric Tools and Guides.* Available from: https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides

UKHab Ltd. (2023). The *UK Habitat Classification – Version 2.0.*

7.0 APPENDIX

Appendix A – BNG Baseline Habitats Map
Appendix B – BNG Post-Development Layout

[redacted]

Legend

- Site Boundary
- Modified Grassland
- Building
- Native Hedgerow
- Line of Trees

ecosupport

K4 Keppel, Daedalus Park
Daedalus Drive
Lee on the Solent, PO13 9FX
E: info@ecosupport.co.uk
T: 01329 832 841

Map	BNG Baseline Habitats Map
Site	Land South of Wandleys Lane
Client	LandQuest UK (Southern) Ltd
Date	24/03/2025

Legend

- Site Boundary
- Other Neutral Grassland
- Modified Grassland
- Vegetated Gardens
- Developed Land, Sealed Surface
- Building
- Native Hedgerow
- Line of Trees
- Species-rich Native Hedgerow
- Individual Trees

ecosupport

K4 Keppel, Daedalus Park
Daedalus Drive
Lee on the Solent, PO13 9FX
E: info@ecosupport.co.uk
T: 01329 832 841

Map	BNG Post Development Habitats Map
Site	Land South of Wandleys Lane
Client	LandQuest UK (Southern) Ltd
Date	24/03/2025