



BNG Habitat Management & Monitoring Plan

Land Known as Interbridges,
Emsworth

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Report	Biodiversity Net Gain Assessment, Management and Monitoring Plan
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1.0 INTRODUCTION

1.1 Background

Ecosupport Ltd. were commissioned by PNH Properties Ltd to undertake a Biodiversity Net Gain Assessment at the 'Land Known as Interbridges, Emsworth' and detail the results of this assessment within a Habitat Management and Monitoring Plan.

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. A comprehensive management strategy will be included following the finalisation of the offsetting strategy. The following points will be covered (DEFRA, 2023a):

- How off-site gains and / or significant on-site enhancements will be managed, taking into account any legal restrictions and requirements,
- 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.

This report should be read in conjunction with the associated Preliminary Ecological Appraisal (Ecosupport, 2024)

1.2 Site Location and Description

The site is located adjacent to the A27 known as land associated with Interbridges, Emsworth PO10 7PH centered on OS grid reference SU749063 (**Fig 1**). The site covers approximately 0.65ha and comprises predominantly of grassland, woodland and scrub. The site is bound by the A27 to the north, the railway to the south and further scrub/trees to the east and west of the site.

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, 2023b).

2.1 Habitat Assessment

The 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 the survey walkover on the 27th March 2024 and reported within the PEA (Ecosupport, 2024). The PEA should be referred to for information on UKHab habitat classifications on site and plant species recorded.

It is acknowledged that the habitats on site differed marginally to those identified by Aluco Ecology Ltd (2014) as part of their initial ecological assessment associated with the previous full granted planning application (ref: APP/10/00912 and variant of condition APP/16/00295), following habitat management and reptile mitigation works undertaken in 2023. Whilst typically it would be considered best practice to assess the baseline habitat condition as it was prior to vegetation management works, given that the works were carried out lawfully as part of prior granted planning application (prior to biodiversity net gain becoming mandatory for sites), and that the proposed new application is a result of changing economic circumstances, it is considered that utilising the sites current habitat types and conditions would be appropriate given the above reasoning.

A condition assessment, in line with the Statutory Biodiversity Metric Technical Annex 1, was carried out on site by Gareth Ainscough MSc ACIEEM, Project Ecologist with Ecosupport on the 27th March 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, 2023b). 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.

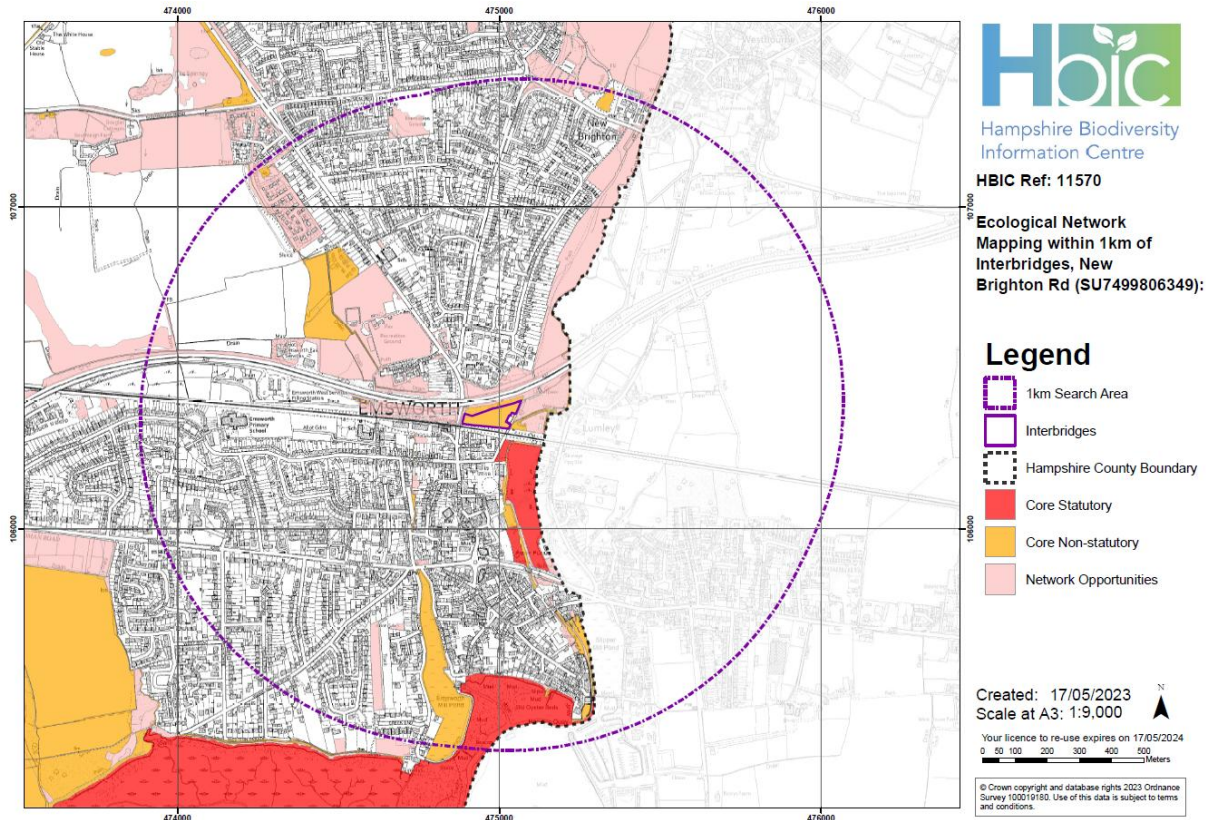
2.3 Habitat Condition

The condition of each habitat was assessed following criteria set out in the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2023b), 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 was found to be the same for each type across the site. Therefore, the results of the habitat condition for each habitat are grouped together for each habitat.

2.4 Strategic Significance

Each habitat was assigned a strategic significance in line with the Statutory Biodiversity Metric User Guide (DEFRA, 2023b). As shown within **Fig 3** below, the site is located within a 'core non-statutory' designated area. Therefore, based on the above, the habitats within the site have been assigned as 'formally identified within the local strategy'.

Figure 3. Ecological networks located within 1 km of the site (HBIC,2024)



2.5 Limitations

As noted in *section 2.1*, the site has been subject to previous habitat management works as part of the full granted planning application (ref: APP/10/00912 and variant of condition APP/16/00295). Notwithstanding this, as also noted and reasoned within this section, this is not considered to have affected the accuracy of the site's valuation.

3.0 EXISTING HABITATS AND DEVELOPMENT PROPOSALS

The habitats on site were categorised according to UK Hab Ltd. Habitat Definitions Version 2.0 (2023) as listed below (please refer to the **Baseline Habitats map appended** for information on the locations of these habitats on site):

- g3c – Other neutral grassland (32 – Scattered trees, 517 – Recent management) (**Fig 4**)
- h3d – Bramble scrub (517 – Recent management) (**Fig 5**)
- w1h – Other woodland; mixed (**Fig 6**)

Figure 4. View of the g3c grassland habitat. Taken from the sites western boundary facing east (March, 2024)



Figure 5. View of a section of h3d Bramble scrub situated along the site's northern boundary (March, 2024)



Figure 6. View of a section of the small area of w1h woodland habitat situated along the site's southern boundary (March, 2024)



3.1 Baseline Condition Assessment

The following tables provide detail as to the condition assessments undertaken of the non-linear (**Table 1**) habitats present on site with reference to the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).

Table 1. Existing non-linear habitats present on site including details as to their condition and the condition assessment criteria that have been met / failed as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).

Habitat Type	Area (ha)	Condition	Condition Assessment Notes	Strategic Significance	Parcel Reference - Location Notes
g3c – Other neutral grassland (g3c)	0.146	Moderate	The forb diversity in the sward was consistently > 9 species / m ² , with the grassland species a good representative of this habitat type. Cover of bare ground, Bracken and scrub do not exceed the optimal criteria, with the combined cover of species indicative of sub-optimal conditions not exceeding 5%. The sward height is not varied and therefore fails this criterion. Specifically, criteria A, C, D and E were met.	Formally identified in local strategy – forms part of the core non-statutory ecological network.	Grassland strip through the centre of the site (G1).
Bramble Scrub (h3d)	0.429	Condition Assessment N/A	-	Formally identified in local strategy – forms part of the core non-statutory ecological network.	Bramble scrub situated along the northern and southern portions of the site (BS1, BS2).
Other Woodland; Mixed (w1h)	0.031	Poor	Woodland featured ‘moderate’ species diversity in both the canopy and ground layer with no invasive plant species and limited damage noted. The woodland did however lack a good age distribution and overall structure, with no veteran trees or deadwood features present. Specifically, criteria scores were A:1, B:3, C:3, D:2, E:2, F:3, G:1, H:3, I:2, J:1, K:1, L:1 & M:2 Poor <26 (25)	Formally identified in local strategy – forms part of the core non-statutory ecological network.	Woodland habitat situated along the southern boundary of the site (W1).
Individual Trees (Urban)	0.0366	Good	A single mature Scots Pine was present within the sites south-western corner. Specially, criteria A, B, C, D and F were met.	Formally identified in local strategy – forms part of the core non-statutory ecological network.	T14 located within the south-western corner of the site.

4.0 PROPOSED CREATED HABITATS & NET GAIN ASSESSMENT

4.1 On-Site Proposals

Following consultation with PNH Properties and IJLA, in order to minimise the loss of biodiversity on site, the following habitats are being retained, enhanced and created (please refer to the **Post-Development Layout appended** for information on the locations of these habitats) in line with landscape plan drawing, DWG No. M444-200 (IJLA, 2024). 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.

Section 5.0 details the proposed planting and ongoing management required to ensure the stated condition criteria are met for each habitat type. This report (including planting and management specifications) has been prepared in conjunction with IJLA (IJLA, 2024).

NB. Should planting and management prescriptions need amending when drawing up the detailed landscape strategy, this will first be approved by an ecologist to ensure the recommendations are in line with the Biodiversity Net Gain Assessment.

4.1.1 Non-Linear Habitats

Table 2 indicates those habitats due to be retained, enhanced and created on site with details provided, where appropriate, as to how the necessary condition criteria will be met.

Table 2. Non-linear habitats to be retained, 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	Strategic Significance	Parcel Reference - Location Notes
Modified Grassland	Created	0.061	Poor	No conditions required to be targeted to achieve 'poor' condition as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).	Formally identified in local strategy – forms part of the core non-statutory ecological network.	N/A – Located throughout the site (G2-G10).
Developed Land; Sealed Surface	Created	0.203	N/A – Other	No condition assessment required as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).	Whilst area is formally identified in local strategy (forms part of the core non-statutory ecological network), this created habitat type is not considered to be of ecological importance.	N/A – Located throughout the site (roads, driveways etc.).
Developed Land; Sealed Surface	Created	0.152	N/A – Other	No condition assessment required as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).	Whilst area is formally identified in local strategy (forms part of the core non-statutory ecological network), this created habitat type is not considered to be of ecological importance.	N/A – Located throughout the site (Buildings)
Artificial Unvegetated;	Created	0.13	N/A - Other	No condition assessment required as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).	Whilst area is formally identified in local strategy (forms	N/A – Yard area located along the

Unsealed Surface					part of the core non-statutory ecological network), this created habitat type is not considered to be of ecological importance.	south-eastern boundary of the site
Mixed Scrub	Created	0.016	Moderate	Mixed scrub of 'moderate' condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). Specifically criteria A, C and E will be targeted through ensuring that at least 3 native woody species are present with at least 80% of the scrub comprising of native species. Furthermore, the scrub will be managed to remove invasive non-native species or species indicative of sub-optimal conditions as outlined within the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). The adjacent grassland habitat will be managed to provide sheltered edges along each scrub parcel.	Formally identified in local strategy – forms part of the core non-statutory ecological network.	Two areas of mixed scrub are present within the sites south-western and eastern boundaries (MS1-4).
Hazel Scrub	Created	0.001	Poor	No conditions required to be targeted to achieve 'poor' condition as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).	Formally identified in local strategy – forms part of the core non-statutory ecological network.	Small section situated along the sites southern boundary (HS1)
Other Neutral Grassland	Created	0.011	Poor	Other neutral grassland of 'poor' condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b) to create wildflower areas, with suitable buffers from areas of formally managed modified grassland habitat. Whilst these areas will be suitably seeded to encourage species diversity, no conditions are required to be targeted to achieve 'poor' condition	Formally identified in local strategy – forms part of the core non-statutory ecological network.	Two sections of other natural grassland habitat will be created within the sites south-western corner and along the northern boundary (ONG1-3).

				as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).		
Introduced Shrub	Created	0.011	Condition Assessment N/A	No condition assessment required as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). <i>(Ornamental planting areas have also been included within this category due to an absence of another suitable category within the BNG Statutory metric)</i>	Whilst area is formally identified in local strategy (forms part of the core non-statutory ecological network), this created habitat type is not considered to be of ecological importance.	Areas of ornamental planting/ introduced shrub are present in formally managed areas across the site.
Individual Trees (Urban)	Created	0.0041	Moderate	One urban tree of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b). Specifically, criteria A, B and F will be targeted, with the tree comprising of a native species, and position were at least 20% of the canopy will oversail vegetation beneath.	Formally identified in local strategy – forms part of the core non-statutory ecological network.	One individual tree will be planted along the site's western boundary.
Other Woodland; Mixed (w1h)	Retained	0.031	Poor	Whilst the woodland will be retained as part of the proposed works, five trees (T5,T6,T8,T11 and T12) have been recommended for removal/ thinning works on the grounds of health and safety within the associated arboricultural report (Johnston Tree Consultancy, 2024). In addition, whilst it is anticipated that there will be some degradation with a yard proposed in close proximity, given that the trees will be suitability protected and the 'poor' baseline classification, it is anticipated that the proposed works will results in a reduced condition within the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).	Formally identified in local strategy – forms part of the core non-statutory ecological network.	Woodland habitat situated along the southern boundary of the site (W1).

Individual Trees (Urban)	Retained	0.0366	Good	The tree will be retained as part of the proposed works, with the anticipation that there will be no condition degradation as a result.	Formally identified in local strategy – forms part of the core non-statutory ecological network.	T14 located within the south-western corner of the site.
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4.1.2 Linear Habitats

Table 3 indicates the linear habitats due to be created on site with details provided, where appropriate, as to how the necessary condition criteria will be met.

Table 3. 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	Strategic Significance	Parcel Reference - Location Notes
Native Hedgerow	Created	0.019	Poor	No conditions required to be targeted to achieve 'poor' condition as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).	Formally identified in local strategy – forms part of the core non-statutory ecological network.	H1
Non-native and Ornamental Hedgerow	Created	0.017	Poor	No conditions required to be targeted to achieve 'poor' condition as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).	Formally identified in local strategy – forms part of the core non-statutory ecological network.	H2
Non-native and Ornamental Hedgerow	Created	0.011	Poor	No conditions required to be targeted to achieve 'poor' condition as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).	Formally identified in local strategy – forms part of the core non-statutory ecological network.	H3
Non-native and Ornamental Hedgerow	Created	0.015	Poor	No conditions required to be targeted to achieve 'poor' condition as per the Statutory Biodiversity Metric Technical Annex 1 (Defra, 2023b).	Formally identified in local strategy – forms part of the core non-statutory ecological network.	H4

4.2 Metric Calculation

Following the incorporation of the above measures into the DEFRA Statutory Biodiversity Metric, on site there is a **net loss of -75.52% in habitats (or -2.99 habitat units)** and the trading rules are **not satisfied (Fig 7)**. Therefore, the requirement of a 10% net gain for biodiversity has not been achieved on site and as such further measures are required through off-site habitat enhancement. The development also will create a net gain of 0.12 hedgerow units.

Figure 7. Screenshot of the 'headline results' output from the BNG assessment undertaken for the site using the DEFRA Statutory Biodiversity Metric.

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-2.99
	Hedgerow units	0.12
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-75.52%
	Hedgerow units	N/A
	Watercourse units	0.00%
Trading rules satisfied?	No - Check Trading Summaries ▲	

4.3 Off-Setting

Based on the current site layout, it has not been possible to achieve the necessary 10% net gain or satisfy trading rules within the constraints of the site. Therefore, based on the 'Headline Results' tab, **a total of 3.39 habitat units would be required to provide a 10% biodiversity net gain for this development.** In order to address the habitat deficit detailed in the 'Trading Summary Area Habitats', the offset units would need to comprise of at least 1.86 units of broad 'heathland and scrub' habitat (of medium distinctiveness or higher) and 1.30 units of broad 'grassland' habitat (of medium distinctiveness or higher).

In order to address the current habitat deficit, it is understood that credits will be purchased from the Habitat Bank, with the Iford Biodiversity Project site (BNG sites reference : BGS-290224001) utilised to provide appropriate offsetting for this project.

5.0 PROPOSED CREATED HABITATS & NET GAIN ASSESSMENT

At the current stage, a detailed landscape scheme is not yet available and, therefore, the below sections provide general recommendations with regard to the management of the habitats on site. Should the provision of a detailed landscape scheme be conditioned in the future, the information within the below sections will be used to inform the landscape strategy to ensure it remains consistent with the Biodiversity Net Gain assessment.

5.1 Protection of Retained Habitats

All of the habitats to be retained or enhanced will be protected from damage during the works and will be fenced using Heras fencing or similar to prevent access by machinery as outlined by Johnston Tree Consultancy arboricultural report and method statement (Johnston Tree Consultancy, 2024). Where large mature trees are present, they will be protected using standard arboricultural tree protection measures which include protection of the canopy and prevention of root compaction.

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 during the works and ensure the habitats and any wildlife species that may be using them are protected.

5.2 Modified Grassland

5.2.1 Proposed Planting

Areas of modified grassland of 'poor' condition are proposed for creation around the site boundary with scattered areas throughout the site. This grassland will be seeded with Emorsgate EG22 – Strong Lawn Grass Mixture or similar (approved by an ecologist). Additional areas situated along the sites eastern boundary will be planted with native groundcover species as outlined within the landscape planting schedule, DWG No. M444-200 (IJLA, 2024).

5.2.2 Management

The sowing of these seeds will be completed either during the Spring (March-May) or the late Summer (August-October) when the temperatures are warm, and the ground is dry. The seed must be surface sown at an even distribution throughout the entire landscaped area.

Given the formal location of this grassland surrounding car parking areas and fronting the proposed buildings, it is expected to be regularly maintained to a short ward height during April to August.

First year management: During the first year the grassland areas must be regularly maintained to the above noted heights every 3-4 weeks (or more frequently as needed) 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.

Management Once Established: Once the seed is established after the first year, regular mowing is still expected which will result in a shorter sward height however grass should not be cut lower than 30mm.

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

5.3 Individual (Urban) Trees

5.3.1 Proposed Planting

One native tree (Rowan, *Sorbus aucuparia*) will be planted close to the site entrance at the western boundary.

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 proactively removed for the **first 2 – 3 years**. Bark mulch is recommended around each tree and will act as an effective management method to also suppress 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

The tree 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.

5.4 Other Neutral Grassland (Wildflower Meadow)

5.4.1 Proposed Planting & Enhancement

Two areas of other neutral grassland will be created as part of the proposed landscaping schedule. These habitats will be established via sowing of a suitable wildflower mix, with the proposed area along the sites northern boundary to be seeded with Emorsgate EM2 – Standard General Purpose Meadow Mixture and the grassland within the sites south-western corner to be seeded Emorsgate EW1 – Woodland Mixture. The EM2 mixture comprises of other neutral grassland indicator species such as Common Bent (*Agrostis capillaris*), Crested Dog's Tail (*Cynosurus cristatus*), Common Knapweed (*Centurea nigra*) and Agrimony (*Agrimonia eupatoria*). In addition to other neutral grassland indicator species, the EW1 mix includes shade tolerant grasses and wildflowers to assist establishment within close proximity to retained trees and planted shrubs. The sowing of these seeds will be completed either during the Spring (March-May) or the late Summer (August-October) when the temperatures are warm, and the ground is dry. The seed must be surface sown at an even distribution throughout the entire landscaped area.

5.4.2 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 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.

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 (species indicative of sub-optimal condition) 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: After the first year, the wildflower areas will be mown in Spring to 100mm and will then be left to flower through to late July/August. This is beneficial for nesting birds, which do not fledge until late July, as well as insects and other wildlife. After flowering, the area will undergo a hay cut with growth reduced to 50mm.

Targeted scrub removal will also need to be carried out as necessary to prevent encroachment into the grassland.

5.5 Mixed/ Hazel Scrub

5.5.1 Proposed Planting

Within the areas of Mixed Scrub to be created, native planting will be undertaken to ensure at least 3 native woody species are present with no one species dominant. Species to be planted include Dogwood (*Cornus sanguinea*), Hazel (*Corylus avellana*), Privet (*Ligustrum vulgare*), Wayfaring Tree (*Viburnum lantana*), Dog Rose (*Rosa canina*) and Spindle (*Euonymus europaeus*) in line with landscape planting schedule (IJLA, 2024). For the Hazel scrub section, this section will be planted with a Hazel monoculture.

Shrubs will be planted at 1m centres to allow foraging (1.2/m²) (IJLA, 2024) to avoid creating dense clusters. The best time to plant is late autumn and it is recommended to avoid freezing temperatures or heat. The scrub will become denser and more connected as it grows up.

5.5.2 Invasive / Undesirable Species Removal

Throughout all of the mixed scrub parcels, removal of invasive species will be undertaken as necessary if any are to establish on site.

5.5.3 General Management

Following establishment, scrub will require minimal ongoing management however the following measures can be employed as necessary:

- New scrub will be weeded following first planting and watered whenever necessary during the first growing season.
- Scrub will be cut back annually as needed to ensure the area does not become overgrown and thinned every five years. Different areas of scrub will be cut back / thinned on rotation in order to ensure a diverse age range (seedlings, sapling, young shrubs and mature shrubs) persists.
- Any existing or later establishing Bramble will be reduced in density and will be maintained at approximately 15% density within the scrub patches.
- Ongoing management will be undertaken to prevent successional scrub developing within the adjacent grassland areas.
- Management must take into account the requirement for maintaining habitat connectivity across the site. Should any such vegetation die or its density become sparse, additional planting will be undertaken, replacing like-for-like.

All management of trees and scrub will be undertaken outside of the bird nesting season, which spans February – August inclusive (Natural England, 2015). A well-developed edge will be encouraged by employing a less intensive mowing regime for the surrounding grassland in order to encourage a longer sward height. As part of this process, scalloped edges will be created to provide a variety of shade and temperature conditions for invertebrates and reptiles.

5.6 Mixed Hedgerows

5.6.1 Proposed Planting

Several mixed native and non-native hedgerows will be planted across the site both as screening along the sites western boundary and within formal locations around the proposed industrial units. The non-native hedgerow features will comprise of *Euonymus japonicus* 'Green Spire', with the native hedgerow along the sites western boundary comprising of a 50/50 split between *Crataegus monogyna* and *Prunus spinosa*

The shrubs will be planted in staggered double rows with 5 plants per linear metre (if using bareroot stock) or 3-4 plants per linear metre (if using container grown stock).

5.6.2 Management

Given the formal locations of the majority of the hedgerows on site, it is expected that they will be clipped annually to maintain the desired height and width.

5.7 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 the condition of all of the habitats on site to assess if they have been achieved 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 Annex 1 (DEFRA, 2023b),
- 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 written up in accordance with the BNG Habitat Monitoring Report template provided by Natural England (2023) and will be sent to the LPA.

5.8 Safeguarding

The developer and project manager will be responsible for briefing all site personnel of the ecological sensitivities of the site and implementing the habitat enhancement, creation and management measures outlined within **Sections 4.0 & 5.0**. 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.

5.9 Post-Construction Habitat Creation

Table 4 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.

5.10 Management Responsibilities

A management contractor that will assume responsibility for the management and maintenance of

the newly created and enhanced habitats has not been appointed at this stage (to be updated upon appointment). 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 appointed contractor or other agreed party to carry out the works.

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;
- The compliance check will include the write up and submission of a BNG Habitat 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 Habitat Monitoring report will include a section addressing any raised issues identified during the compliance check;
- The BNG Habitat Monitoring report is submitted to the LPA for review and comment.

Table 4. 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 (Section 5.1)	Installation of Heras fencing for protection	Anytime	Heras fencing to be erected along the boundary of the western mixed scrub and the northern ecological buffer to prevent these areas from being damaged during works.
Habitat Creation Modified Grassland (Sections 5.2)	Planting	Ideally Autumn or Spring	Establish the grassland through sowing of Emorsgate EG22 – Strong Lawn Grass Mixture / Planting of native groundcover
	Year 1 Management	Routinely as required	- Control annual weed growth by regular mowing throughout the first year to minimise competition and weed seed production. - If necessary, glyphosate-based weed killer can be used to spot treat any areas with dense patches of Nettles or Bramble.
Habitat Creation Individual Trees (Sections 5.3)	Planting	Late Autumn	- Plant native tree species. - Apply Rootgrow or Bonemeal to encourage healthy root growth. - Apply Mycorrhizal treatment to the tree roots.
	Year 1 Management	Routinely as required	- Remove weeds from a 1m exclusion zone around each newly planted tree. - Apply mulch around the base of the tree as required.
Habitat Creation Other Neutral Grassland (Sections 5.4)	Creation of grassland	Ideally Autumn or Spring	The areas of other neutral grassland will be sown with either Emorsgate EM2 or Emorsgate EW1 as outlined within the planting schedule (IJLA, 2024)
	Year 1 Management	Routinely as required	Control annual weed growth by mowing to 50-75mm throughout the first year to minimise competition and weed seed production.

Habitat Creation Mixed/ Hazel Scrub (Sections 5.5)	Plant native shrub species	Late Autumn	Plant at least 3 different native shrub species.
	Removal of undesirable species	Anytime	Any undesirable species present within MS1 will be removed and replaced with native species.
	Year 1 Management	Spring and Summer	- Weed around newly planted shrubs as necessary. - Water whenever necessary during the first growing season. - Replace any dead shrubs like-for-like.
Habitat Creation Mixed Hedgerows (Sections 5.6)	Planting	Late Autumn	Plant with native shrub species in double staggered rows with 5 plants per linear metre (if using bareroot stock) or 3-4 plants per linear metre (if using container grown stock).
	Year 1 Management	Spring and Summer	- Weed around newly planted shrubs as necessary. - Water whenever necessary during the first growing season. - Replace any dead shrubs like-for-like.

5.8 Years 2 – 30 Management / Monitoring Table

Once the initial works covering the first year of management / monitoring have been completed as outlined in **Table 4**, 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 5** below provides an overview of the actions required and the timings of when they should be complete (covering years 2– 30 post construction).

Table 5. 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
Modified Grassland (Section 5.2)	Years 2-30 Management	Year-round	The grassland will be subject to regular mowing to a height of 30-50mm during April-August and 50-70mm for the remainder of the year.
	Removal of undesirable species	Winter i.e. October - February (outside of bird nesting season)	Targeted scrub, bracken and invasive species removal will be carried out as necessary.
Individual Trees (Section 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.
Habitat Creation Other Neutral Grassland (Sections 5.4)	Years 2 – 30 Management	Spring and mid to late Summer	- Mow to 100mm in Spring. - Leave to flower until late July / August. - Conduct single hay cut after flowering with growth reduced to 50mm. - Manage sections of each grassland parcel at different times from late June to the end of August.

	Removal of undesirable species	Winter i.e. October - February (outside of bird nesting season)	Targeted scrub, bracken and invasive species removal will be carried out as necessary.
Habitat Creation Mixed/ Hazel Scrub (Sections 5.5)	Cutting back / thinning	Winter i.e. October - February (outside of bird nesting season)	- Scrub will be cut back annually as needed to ensure areas do not become overgrown. - Thinning will take place routinely every 5 years. - Different areas will be cut back / thinned on rotation to maintain a diverse age range. - Any scrub encroaching into adjacent habitats will be cut back as needed.
	Bramble management	Winter i.e. October - February (outside of bird nesting season)	Bramble will be cut back as necessary to maintain a density of no more than 15%.
	Invasive species removal	Winter i.e. October - February (outside of bird nesting season)	Removal of invasive species will be undertaken as necessary if they establish on site.
	Shrub replacement	Late Autumn	Any dead shrubs or areas that become sparse will be planted with new native shrubs, replacing like-for-like.
Habitat Creation Mixed Hedgerows (Sections 5.6)	Years 1 - 30 Management	Winter i.e. October - February (outside of bird nesting season)	- Formal hedgerows to be clipped as necessary to maintain desired height and width. - Use hand tools and avoid the use of flails. - Allow northern boundary hedgerow to grow cutting only one side if necessary to control growth.
	Year 1 - 30 Monitoring	Late Winter – Early Spring Years 1 – 3: Annually Years 4 – 30: Bi-annually	- Hedgerows will be inspected by a suitably experienced ecologist to assess the general health of the hedgerow. - Remedial action will be taken as necessary. - Any plants that are removed, die or become seriously damaged will be replaced like-for-like in the next planting season.

6.0 REFERENCES

DEFRA (2023a) *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>

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IJLA (2024) *Emsworth Business Park, North St, Emsworth – Landscape Plan*, DWG No.M444-200

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

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

APPENDIX

Appendix A – Pre-development Baseline Habitats Map

Appendix B – Post-development Habitats Map



Legend

— Site Boundary

Other Neutral Grassland (g3c)

Bramble Scrub (h3d)

Other Woodland; Mixed (w1h)



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Map	BNG Pre-Development Map
Site	Land Known As Interbridges
Client	PNH Properties
Date	12/03/2025

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Legend

- Site boundary
- Native Hedgerow
- Non-Native Hedgerow
- Planted Individual Tree
- Retained Individual Tree
- Artificial Unvegetated Unsealed Surface (u1c)
- Building (u1b5)
- Developed Land Sealed Surface (u1b)
- Introduced Shrub (847)
- Modified Grassland (g4)
- Other Woodland; Mixed (w1h)
- Mixed Scrub (h3h)
- Hazel Scrub (h3b)
- Other Neutral Grassland (g3c)



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Map BNG Post-Development Map

Site Land Known As Interbridges

Client PNH Properties

Date 13/03/2025

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