



# Habitat Management and Monitoring Plan

<b>Site Name:</b>	Ashwood Care Home, Spalding
<b>Date:</b>	24/07/2025
<b>Version:</b>	V1.0

Author:



Client:



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## Version Control

The version control is used for updates to the content. Record the initial version and further version control details in this table each time the management plan is altered throughout the management and monitoring period.

Version	Issue Status	Prepared by / Date	Approved by / Date
V1	ISSUED	PN 24/07/2025	

## Document Details

Provide ownership, copyright and licensing information within this table.

Authorship Details
This HMMP has been produced by Phil Newberry, Principle Botanist at RammSanderson Ecology Ltd.
Country Court Care Homes will own and manage the scheme.
Ordnance survey maps have been reproduced under licence 100019713.

Note: The original baseline survey including a BNG Assessment in Statutory Metric was conducted by RammSanderson in March 2024. The baseline survey including the BNG Assessment and Habitat Condition Assessments were updated by Anna Andrzejczyk, during April 2025.

# 1. Project Background

Summarise the key aspects of your management plan in this section. Table PB-B01 can be extended to suit the specific needs of individual projects.

Site Overview PB-B01	
<b>Project type</b>	On Site Development.
<b>Development Name and Address</b>	Country Court Care Homes 5 Limited Country Court Care Group Olympus House Staniland Way Werrington Peterborough PE4 6NA.
<b>BNG Project Name and Address</b>	As above.
<b>Author Organisation</b>	RammSanderson Ecology Ltd.
<b>Landowner</b>	Country Court Care Homes Limited.
<b>Land Manager</b>	<u>Management Company – name to be confirmed</u>
<b>Responsible person/organisation for creating or enhancing the habitat</b>	Country Court Care Homes Limited.
<b>Period covered by this management plan</b>	30 years. Year 1 will start following completion of construction and all soft landscaping. Approximate start and end dates of HMMP July 2026 – July 2056.
<b>Planning authority</b>	South Holland District Council.
<b>Planning reference (if applicable)</b>	H16-0437-24.
<b>BNG register reference (if applicable)</b>	N/A.
<b>Central OS grid reference</b>	TF 17081 04115.
<b>Metric revision/title</b>	RSE_9482_BIA_V1R1.
<b>Are any Irreplaceable Habitats present onsite</b>	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>

## Summary of Management Plan

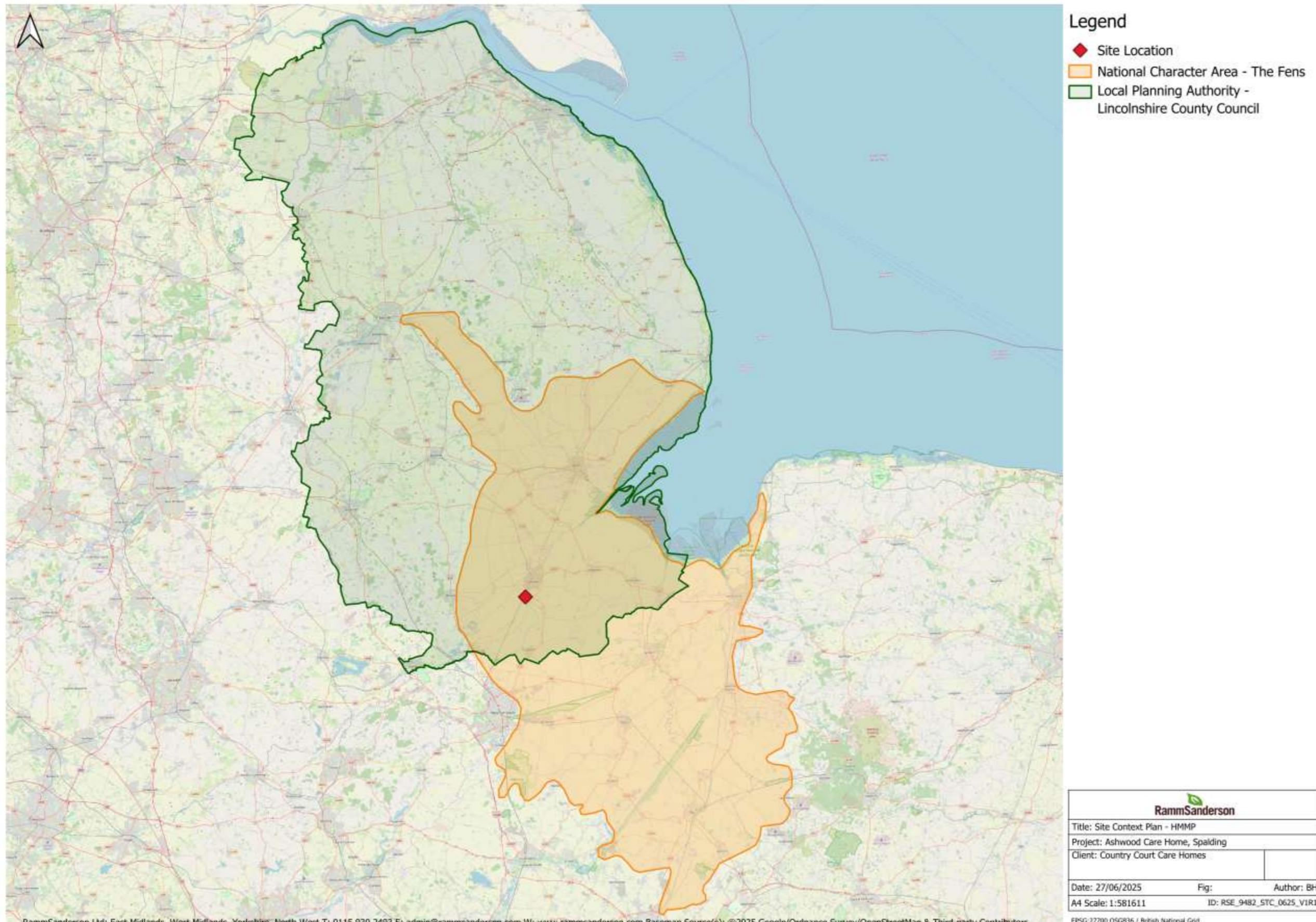
Habitats to be Retained, Created and Enhanced PB-B02
Creation of native species-rich hedgerows, a non-native ornamental hedgerow, other neutral grassland, modified grassland and ornamental shrubs, as well as scattered trees. The existing courtyard landscaping is to be retained.
Timescales for Actions PB-B03
30 years. Year 1 will start following completion of construction and all soft landscaping. Approximate start and end dates of HMMP July 2026 – July 2056.
Monitoring Requirements PB-B04
Monitoring to be undertaken in Years 1, 3 & 5 (establishment) and then Years 10, 20 & 30 thereafter. This is considered proportionate for soft landscaping and habitats created and maintained within a small residential care home site.
Required Consents and Licences PB-B05
None known to be required.
Funding PB-B06
As an existing Care Home operation, the ongoing costs associated with the HMMP will be managed through the business' normal operating expenditure. The capital outlay, however, will form part of the broader development and construction costs, which are being part-funded by the client's own reserves and part-funded by specialist development finance.
Legal Agreement PB-B07
TBC with LPA.

## Site Boundary Plan PB-F01



## Site Context Plan PB-F02

This plan should show the location of the site, including the LPA, boundary, national character area, and any relevant landscape scale policy or guidance information.



## Phasing strategy

Will the proposed work measures be delivered in phases? PB-B08		Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
All of the landscaping and habitat creation works will form part of the Main Building Contract and be delivered in a single phase. The anticipated completion of the contracted works is Q3 / Q4 2026.		

## Roles and Responsibilities

Provide details of the responsible persons and organisation(s) for delivering this management plan.

Ecologist or Other Professional Responsible for HMMP PB-B09				
Name or Initials		PN		
Organisation		RammSanderson Ltd.		
Responsibility	Start Date:	July 2026	End Date:	July 2056
Completion of the HMMP.				
Statement of Competency				
PN has been a professional ecologist for over ten years. and has over 17 years' experience in the development and ecology industry. Phil has been undertaking technical BNG assessments for over two years. Phil has also undertaken baseline ecology assessments for a wide range of development sites over the last ten years which includes Extended Phase 1 Habitat Surveys, UK Habitats Surveys, Habitat Condition Assessments for BNG, Preliminary Protected Species Surveys and Phase 2 Protected Species Surveys.				

Landowner or Land Manager PB-B10				
Name or Initials		Country Care Homes Limited		
Organisation		Country Care Homes Limited		
Responsibility	Start Date:	July 2026	End Date:	July 2056
The ownership of soft landscaping areas and habitats within the site will be transferred from Country Court Care Homes Limited to a Management Company who will implement the management prescriptions set out within this HMMP.				
Statement of Competency				
To be confirmed.				
Management Organisation(s) Responsible for Implementing the HMMP PB-B11				
Name or Initials		See Land Manager		
Organisation		N/A		
Responsibility	Start Date:	N/A	End Date:	N/A
N/A				
Statement of Competency				
N/A				
LPA or Responsible Body for Reviewing HMMP PB-B12				
Name or Initials		To be confirmed.		
Organisation		South Holland District Council.		
Responsibility	Start Date:	July 2026	End Date:	July 2056
Review of HMMP and monitoring reports.				

## Land Use Summary

### Overview of Baseline Site Use PB-B13

The Site is currently used for residential care home purposes and is comprised of modified grassland, scattered trees, sparsely vegetated land comprised of ruderal and ephemeral species, as well an ornamental area comprising a vegetated garden. Other habitats present were comprised of a hardstanding car park and the care home building.

### Overview of Proposed Site Use PB-B14

The proposed scheme involves the development of the current care home with the erection of a two-storey rear extension to provide additional bedrooms, day space, storage, nurses station, assisted bathrooms and additional car parking spaces. The proposed plan will incorporate landscaping including the creation of modified and other neutral grassland habitats, hedgerows and scattered trees. The existing courtyard landscaping is to be retained.

### Site Context Photos PB-F03

Please include two overview photographs of the site in its current form here. Include additional photographs in an appendix if needed. Tick if additional photographs are provided in the Appendices

Reference: [Click or tap here to enter text.](#)



## Site Baseline, Environmental Information and Associated Impacts Checklist PB-T01

Consider the Baseline and Environmental Information listed below. These are likely to be appropriate factors informing your proposals and project design. They can provide the reviewer with important contextual information for the management prescriptions provided later in this document. Use your professional judgement to determine which factors are relevant to your specific project.

Please use the check box to indicate which are included in your plan. For any not included, provide brief reasons why the factor is not relevant to your project using your professional judgement. Where this information is provided elsewhere, you can reference existing reports and, or, plans that have informed your decisions. For the templates for each heading see pages 3-20 of the Companion Document.

Baseline and Environmental Information	Prompts for when these may be relevant. This is not an exhaustive list. Use your professional judgement to determine which are required for your HMMP	Check box if included	Document Reference or Reason if not included
<b>Statutory / Non-statutory Designated Sites</b>	<p>The Site is not subject to a statutory or non-statutory designated site for nature conservation. The Site and land directly adjacent are not within the boundary of a designated site.</p> <p>Cowbit Wash Site of Special Scientific Interest (SSSI) is located just over 785 m to the south-east of the Site and is designated for its value for its peat layers relating to post-glacial sea level changes.</p> <p>Baston Fen Special Area of Conservation (SAC) is located 9.11 km northeast of the Site and has been designated for its important refuge of a diverse community of aquatic and emergent plants. The SAC and SSSI are unlikely to influence the delivery of the landscape plan or HMMP at this distance.</p>	<input type="checkbox"/>	<p>Designated sites do not influence the proposals.</p> <p>As other designated sites do not present constraints or opportunities to this HMMP, a separate template and plan from the Companion Document has not been included for reasons of proportionality.</p>
<b>Protected and Notable Species</b>	<p>There are no records for hazel dormice, white-clawed crayfish, water vole, reptiles or great crested newts within 1km of the Site. Site-specific surveys have identified no evidence of badger setts within the Site to date. Records of hedgehog, otter and several bat species have been returned within 1km of the Site. The closest record is of a bat, located 0.07k from the Site.</p> <p>The proposals set out within this HMMP will create more structurally and species diverse habitats which will be less intensively managed than the Site's previous habitat management regime, to the benefit of species groups such as badgers, bats, wild birds, reptiles, and hedgehogs.</p> <p>However, the proposals set out within this HMMP do not provide bespoke habitat creation or enhancement for specific species group(s) as the current baseline conditions have not identified this as a requirement.</p>	<input type="checkbox"/>	<p>See the Preliminary Ecological Appraisal Report, issued by RammSanderson in 2024 (RSE_8039_R1_V1_PEAR), which includes a records search from Lincolnshire Environmental Records Centre for protected and notable species within 1km of the Site.</p> <p>As bespoke habitats for protected and notable species are not required for this HMMP, a separate template and plan from the Companion Document has not been included for reasons of proportionality.</p>
<b>Invasive Non-Native Species (INNS)</b>	No INNS have been identified within the Site extent. Where INNS are identified during the management period, management prescriptions provide methods for control.	<input type="checkbox"/>	INNS do not significantly influence the proposals.
<b>Biological Records Plan - Sites and Species</b>	No biological records identified which would influence the delivery of the landscape plan or HMMP, (see protected and notable species).	<input type="checkbox"/>	Biological records do not influence the proposals.

<b>Baseline Habitats Survey</b>	The baseline habitats survey has informed the proposals in so far of enhancing habitats to be retained within the scheme and creation of further habitats in line with the habitats naturally occurring on Site. It is considered that the biodiversity value of the newly created habitats will be higher than similar habitats currently present on Site. These habitats include modified grassland, scattered trees, sparsely vegetated land comprised of ruderal and ephemeral species, as well as an ornamental area comprising a vegetated garden. See the Baseline Habitats Survey template inserted into this HMMP from the Companion Document.	<input checked="" type="checkbox"/>	See the Baseline Habitats Survey template inserted into this HMMP from the Companion Document.
<b>Public Access</b>	Public access has influenced the delivery of the landscape plan and HMMP as the landscape typologies, habitats and the relevant condition targets designed into the scheme have been chosen to reflect likely pressure from pedestrian activities due to the presence of a permissive path, as well as use of the scheme generally.	<input type="checkbox"/>	See the Soft Landscaping and Tree Planting Plan (issued by Kova Landscapes) for further details.
<b>Climate</b>	Given the small size of the site and the landscape typologies and habitats designed into the residential scheme, local climate and climate change have not significantly influenced the delivery of the landscape plan or HMMP. A range of tree species have been specified in the landscape plan to provide climate change resilience.	<input type="checkbox"/>	Climate has not significantly influenced the proposals.
<b>Geology and Topography</b>	<p>The bedrock of the Site and wider landscape is Oxford Clay Formation - Mudstone. This is sedimentary bedrock formed between 166.1 and 157.3 million years ago during the Jurassic period<sup>1</sup>.</p> <p>Superficial deposits are present over the bedrock; this is Tidal Flat Deposits - Clay and Silt. Sedimentary superficial deposit formed between 11.8 thousand years ago and the present during the Quaternary period. The topography of the Site and of the surrounding areas is flat<sup>2</sup>.</p> <p>The geology and topography of the Site has not influenced the delivery of the landscape plan or HMMP. The underlying geology and Site topography will not prevent the establishment of the landscape typologies and habitats designed within the scheme.</p>	<input type="checkbox"/>	Geological information has been derived from the British Geological Societies On-line Geology Viewer. Geology and topography have not significantly influenced the proposals.
<b>Agricultural Land Status</b>	The Site does not support land favourable for agricultural management therefore agricultural land status has not influenced the delivery of the landscape plan or HMMP.	<input type="checkbox"/>	Agricultural land status has not significantly influenced the proposals.

<sup>1</sup> [BGS Geology Viewer - British Geological Survey](#)

<sup>2</sup> [MAGIC](#)

<b>Soils and Substrates</b>	Soils and substrate at the Site are in Soilscape 21 i.e. loamy and clayey soils of coastal flats with naturally high groundwater, as illustrated by the UK Soil Observatory. Whilst a high water table may be present at the Site, it is not considered that this would influence the delivery of the landscape plan or HMMP. Existing habitats and plant species showed no indication of regular water logging (i.e. rushes and sedges) with grass species being indicative of drier ground conditions.	<input type="checkbox"/>	Soils and substrates have not significantly influenced the proposals. Soil information has been derived from the Land Information System (LandIS) Soilscape map.
<b>Contaminated Land</b>	No contaminated land has been identified within the Site.	<input type="checkbox"/>	Contaminated land has not significantly influenced the proposals. Due to the low risk from contaminated land within the Site, a separate template and plan from the Companion Document has not been included for reasons of proportionality.
<b>Hydrology and Drainage</b>	See soils and substrates.	<input type="checkbox"/>	Hydrology and drainage have not influenced the proposals.
<b>Flood Risk Zones</b>	The Site is in Flood Zones 2 and 3. Flood Risk Zone 2 is located towards the western extent of the Site, whilst Flood Risk Zone 3 is located towards the eastern extent of the Site. A high water table may exist within the Site. Developments situated within Flood Zones 2 and 3 require a Flood Risk Assessment to be submitted as part of any planning application, showing the risks of flooding to the Site. <a href="#">See soils and substrates section on soil wetness.</a>	<input type="checkbox"/>	Flood Risk information has been derived from the UK Government's Flood Map for planning portal. Risks from flooding are not expected to affect the Scheme. However, further information is given within the Risk Register and Remedial Measures section within this document.
<b>Landscape Character and Designations</b>	The Site is located within The Fens National Character Area (NCA), defined as a landscape heavily influenced by fluvial activity. Given the standard landscape typologies and habitats proposed for the scheme, landscape character and designations have not significantly influenced the delivery of the landscape plan or HMMP.	<input type="checkbox"/>	Landscape character and designations have not significantly influenced the proposals. Due to the low risk from landscape character and designations within the Site, a separate template and plan from the Companion Document has not been included for reasons of proportionality.
<b>Historic Land Use</b>	Online historic maps identify that the Site has been in agricultural use from the 1880's until the mid-20 <sup>th</sup> century. No constraints or opportunities from historic land use are identified. The historical use of the Site has not therefore influenced the delivery of the landscape plan or HMMP.	<input type="checkbox"/>	Historic land use has not influenced the proposals.
<b>Historic Environment and Earth Heritage</b>	There are no archaeological features within the Site which would influence the delivery of the landscape plan or HMMP. No constraints to the proposals from the historic environment and earth heritage were identified.	<input type="checkbox"/>	Historic environment and earth heritage has not influenced the proposals.
<b>Other – please specify</b>	None identified. No additional constraints are identified.	<input type="checkbox"/>	N/A

## Baseline and Environmental Information

### Baseline Habitats Survey

Ecologist responsible for baseline surveys (BI-T03)		Habitat Degradation
Name or Initials	Anna Andrzejczyk.	Are there any signs or evidence that the baseline habitats have been purposefully degraded since 30 <sup>th</sup> January 2020? (BI-B05)
Organisation	RammSanderson Ecology Ltd.	No degradation identified.
Survey Date	01/04/2025.	
Statement of Competency		
The habitat survey was undertaken by Anna Andrzejczyk. Consultant Ecologist at RammSanderson Ecology Ltd, with four years' experience in undertaking a range of ecological surveys and assessing the factors that affect ecology in relation to construction and the built environment.		
Survey conditions and limitations		If habitats have been purposefully degraded, provide details of how this has been accounted for (BI-B06)
No significant limitations identified.		No degradation identified.

## Baseline Habitat Descriptions and Condition

### Habitats (BI-T04)

Parcel Refs	Habitat Type and Code	Irreplaceable	Priority	Description and Condition Justification	Condition	Area (ha)
1	Modified grassland – g4	No	No	<p>Modified grassland was present habitat towards the southern, western and eastern boundaries of the Site. The habitat was comprised of dominant perennial rye-grass, frequent Yorkshire fog, cleavers, ribwort plantain, dock and thistle species, occasional creeping buttercup and rarely abundant mallow species.</p> <p>The condition was assessed as Poor as the habitat failed criteria A 6-8 species per m<sup>2</sup>, though meets four of the criteria in the condition assessment: C scrub accounts for less than 20% of total grassland, D physical damage is evident in less than 5%, F cover of bracken is less than 20% and G there is an absence of invasive non-native species.</p>	Poor	0.1017
2	Vegetated garden – secondary code: 828	No	No	Within the centre of the Site was a heavily managed vegetated garden area with ornamental shrubs. This habitat is exempt from condition assessments.	N/A	0.0318
3	Sparsely vegetated urban land - u1f. Ruderal/ephemeral secondary code: 81	No	No	Towards the southeastern extent of the Site was an area of sparsely vegetated land with ruderal and ephemeral plant species. This habitat has been assessed as poor as the habitat failed criteria: A vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed and B the habitat parcel contains different plant species that are beneficial for wildlife. The habitat passes criteria C invasive non-native plant species were absent.	Poor	0.0101
4	Artificial unvegetated, unsealed surface - u1c	No	No	Towards the entrance of the Site within the northwestern, southern and southeastern extent was an area utilised as an unadopted road with an absence of vegetation. This habitat is exempt from condition assessments.	N/A	0.061
5	Developed land; sealed surface - u1b	No	No	Towards the northern extent of the Site was an area of hardstanding which was utilised as a car park. The existing care home buildings also fall under this habitat category. This habitat is exempt from condition assessments.	N/A	0.2617
T2, T3 and T4	Individual tree - secondary code: 200	No	No	Three semi-mature trees were present towards the western extent of the Site. The condition was assessed as Moderate as the habitat met four of the criteria in the condition assessment: A native species, B the tree canopy is predominantly continuous (individual trees automatically pass this criteria), D there is little or no evidence of an adverse impact on tree health by human activities, and F more than 20% of the tree canopy area is oversailing vegetation beneath.	Moderate	0.0529
T1	Individual tree – secondary code: 203	No	No	One mature tree was present towards the western extent of the Site. The condition was assessed as Good as the habitat met five of the criteria in the condition assessment: A native species, B the tree canopy is predominantly continuous (individual trees automatically pass this criteria), C mature, D there is little or no evidence of an adverse impact on tree health by human activities, and F more than 20% of the tree canopy area is oversailing vegetation beneath.	Good	0.0326

## Priority and Irreplaceable Habitats

### Summary of Priority and Irreplaceable Habitats (BI-B07)

There are no Irreplaceable or Priority Habitats within the Site.

### Potential Constraints and Opportunities for Project (BI-B08)

There are no constraints within the scheme and opportunities exist for the creation of habitats including grassland, scattered trees and hedgerows.





## 2. Planned Management Activities

Provide the site-wide aims and objectives. These should consider the Project Background information section outlined above as well as the outcomes of the Metric.

### Management Plan Aims and Objectives PM-B01

The specific aims and objectives of the HMMP are as follows:

- Maintain an appropriate balance between management of habitats for nature conservation and amenity purposes;
- Provide enhanced habitat for a range a floral and faunal species;
- Achieve successful establishment of new planting;
- Monitor management operations and allow flexibility in the management approach.

## Principles Informed by Design Stage

The project's BNG target(s) should be set and documented early in the design process. Outline how background and baseline information influenced key design principles for the project from an early stage. This can provide useful context for the proposed retention, creation and enhancement measures.

### Design Principles Informed by Baseline Information PM-B02

The baseline habitats and conditions of the Site allow for the creation of other neutral grassland and modified grassland. The creation of new native species-rich hedgerows is to be incorporated within the northern boundary of the Site as well as several planted trees throughout the Site.

Soil sampling may be required prior to habitat creation relating to P, K and pH values.

The existing courtyard is to be retained and re-landscaped with the addition of introduced ornamental shrubs.

## Habitat and Condition Targets PM-T01

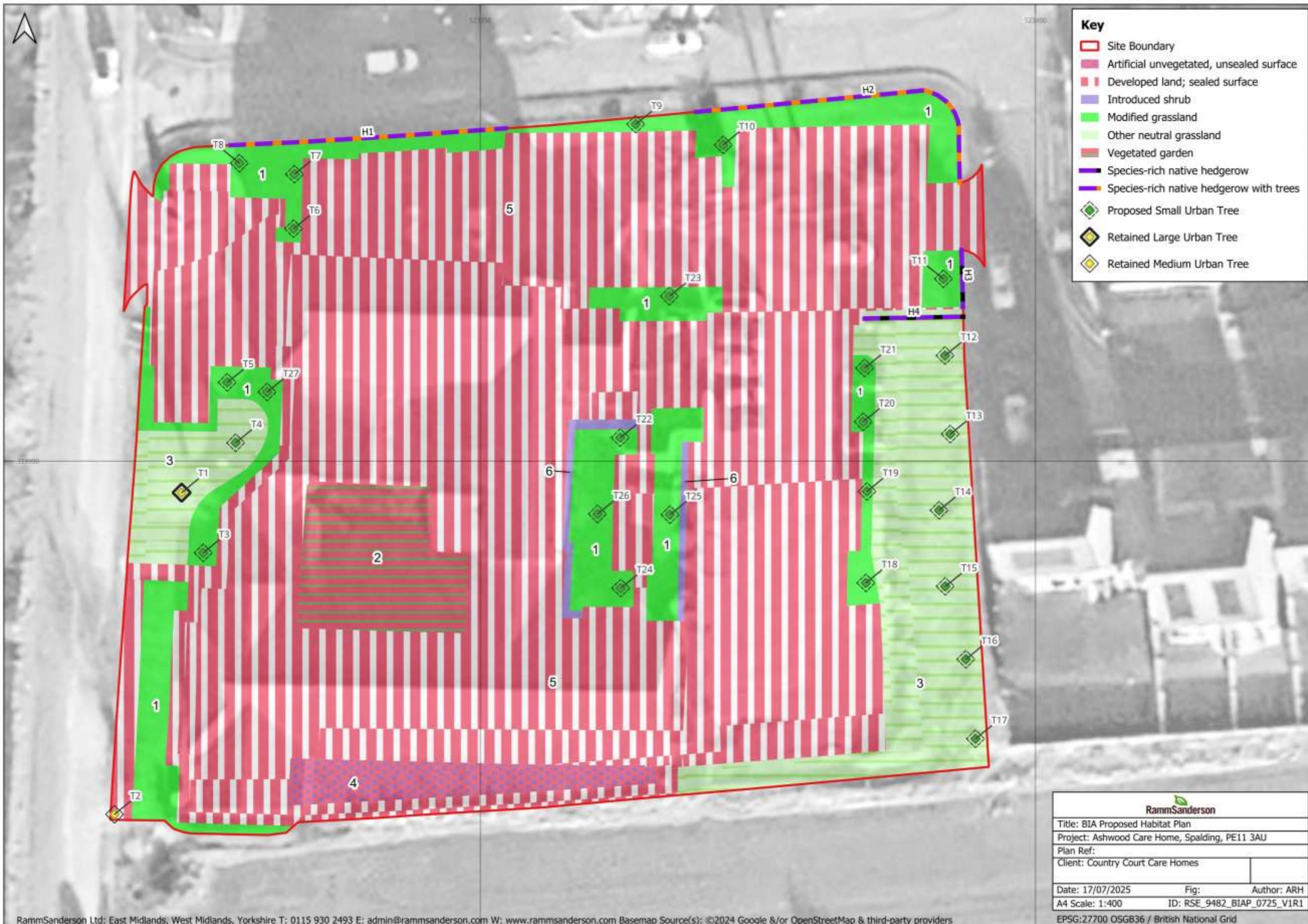
This table presents a summary record of what you have agreed to deliver based on the biodiversity metric. These habitat condition targets form the basis of what the management plan is setting out to achieve. Include the relevant 'Area', 'Hedgerow', and 'Watercourse' types to be implemented and managed throughout the period of 30 years or more.

Baseline Habitat Type	Target Habitat Type	Parcel / Feature Refs	Baseline Condition	Targeted Condition	Years to Targeted Condition	Condition Assessment Targets	Comments
Modified grassland	Modified grassland	1	Poor	Poor	1	Target condition criteria C-G only.	New areas of modified grassland within areas of open space to be managed by frequent mowing.
Modified grassland and sparsely vegetated urban land, developed land-sealed surface and artificially unvegetated unsealed surface	Other neutral grassland	3 (towards the eastern extent of the Site)	Poor for modified grassland, N/A for sparsely vegetated urban land, artificially unvegetated unsealed surface and developed land-sealed surface	Poor	2	Poor condition has been assigned from the size/location/use of the habitat which may limit the habitat in achieving criteria in the condition assessment (including 10 or more vascular plants per m <sup>2</sup> and the appearance matching UKHab description which are essential criterion to achieving a moderate/good condition. Target condition criteria C-E only.	Habitat to be created towards the eastern extent of the Site. Poor condition is to be targeted for this habitat.
Modified grassland	Other neutral grassland	3 (towards the western extent of the Site)	Poor	Poor	2	Poor condition has been assigned from the size/location/use of the habitat which may limit the habitat in achieving criteria in the condition assessment (including 10 or more vascular plants per m <sup>2</sup> and the appearance matching UKHab description which are essential criterion to achieving a moderate/good condition). Target condition criteria C-E only.	Habitat to be created towards the eastern extent of the Site. Poor condition is to be targeted for this habitat.
Sparsely vegetated urban land and modified grassland	Individual trees	T5 – T27 and T41-T42	Poor for modified grassland, N/A for sparsely vegetated urban land.	Moderate	27	Target condition criteria A, B, D and E only for trees T7, T12-T17 and T42.  All other trees are non-native trees, they will need to achieve the following criteria to achieve Moderate condition: B, D and E.	Small urban trees to be planted throughout the site, including a mix of native specimen trees and garden fruit trees.

Sparsely vegetated urban land and modified grassland	Individual trees	T28-T40	Poor for modified grassland, N/A for sparsely vegetated urban land	Poor	27	Poor condition has been assigned from the size/location/use of the habitat which may limit the habitat in achieving criteria in the condition assessment. Target condition criteria B and D only.	12 small non-native trees to be planted within ornamental planting areas.
Developed land-sealed surface, Sparsely vegetated urban land and modified grassland	Introduced shrub	6	Poor for modified grassland, N/A for sparsely vegetated urban land and developed land-sealed surface	N/A	2	N/A	Ornamental flowing shrubs to be planted as part of wildlife-friendly ornamental ground cover. As condition assessments are exempt from this habitat, no management prescriptions have been <a href="#">provided</a> .
Developed land-sealed surface and artificial unvegetated, unsealed surface	Artificial unvegetated, unsealed surface	4	N/A	N/A	1	N/A	Gravel surfacing to the south of the site. As condition assessments are exempt from this habitat, no management prescriptions have been provided.
Sparsely vegetated urban land, artificial unvegetated, unsealed surface and modified grassland	Developed land-sealed surface	5	N/A	N/A	1	N/A	No management prescriptions for this habitat have been provided.
Developed land-sealed surface, sparsely vegetated urban land and modified grassland	Species-rich native hedgerow with trees	H1 and H2	Poor for modified grassland, N/A for sparsely vegetated urban land and developed land-sealed surface	Moderate	5	Target condition criteria A2, B2, C1, C2, D1 and E2.	New hedgerows H1 and H2 targeted to Moderate condition.
Modified grassland and artificial unvegetated, unsealed surface	Species-rich native hedgerow	H3 and H4	Poor	Moderate	5	Target condition criteria A2, B2, C1, C2 and D1.	New hedgerows H3 and H4 targeted to Moderate condition.
Sparsely vegetated urban land	Non-native and ornamental hedgerow	H5 and H6	N/A	Poor	1	N/A	Ornamental hedgerows to be planted within the courtyard. As condition assessments are exempt from this habitat, no management prescriptions have been provided.



# Habitat Creation, Enhancement and Management Plan EM-F01



## Habitat Retention

Provide a concise description of the habitats that are to be retained in their baseline condition. Habitats being retained may still require ongoing measures to maintain their baseline condition.

### Measures to be Implemented to Protect Retained Habitats PM-03

An area of vegetated gardens present towards the centre of the Site has been proposed to be retained. This habitat is exempt from condition assessments under Statutory Biodiversity Metric protocols. Retained trees will be maintained as their current condition.

### Specification of Protective Measures to be Used PM-04

None

## Habitat Retention Plan PM-F01

Provide a plan with the locations of habitats to be retained (including whether to be protected and, or, enhanced) and those to be created under this HMMP. Include parcel references if needed. Tick box if any additional plans are provided in the Appendices  . Reference: Click or tap here to enter text.



## Creation, Enhancement and Management Targets and Prescriptions

### Grassland (Low Distinctiveness)

#### Creation, Enhancement and Management Summary (GL-T01)

Target Habitat:		Modified Grassland				
Condition Assessment Criteria		Targeted	Relevant Parcels	Creation Approach	Enhancement Approach	Management Approach
A	<p>There are 6-8 vascular plant species per m<sup>2</sup> present, including at least 2 forbs. <b>Note - this criterion is essential for achieving Moderate or Good condition.</b></p> <p>Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m<sup>2</sup>, please review the full UKHab description to assess whether the grassland should be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high or very high distinctiveness, please use the relevant condition sheet.</p>	No	N/A.	N/A	N/A	N/A
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	No	N/A	N/A	N/A	N/A
C	<p>Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present).</p> <p>Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.</p>	Yes	1	N/A	N/A	Regular mowing will reduce scrub cover.
D	Physical damage is evident in less than 5% of total grassland area Examples of physical damage include excessive	Yes	1	<p>Creation approach for modified grassland.</p> <p>Correct preparation of ground to receive seed mix.</p>	N/A	Avoidance of mowing when ground is wet/damp. Remediation of damaged areas

	poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.			Seed mix to be sown to be in accordance with approved soft landscape design (as specified at the end of this section).		of grassland through supplementary seeding.
E	Cover of bare ground between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens.)	Yes	1	During establishment and time to target condition (1 year), monitoring to be undertaken by the Project Ecologist as per the Monitoring Schedule (Section 3) with remedial measures implemented where grassland swards are not meeting Condition criteria C-G. This would include supplementary seeding as advised by the Project Ecologist, including additional monitoring visits as defined by the Project Ecologist to determine whether the remedial measures have been effective. At 1 year following sowing, the grassland swards must be healthy and vigorous, free from disease, discolouration, scorch or wilt, and to present a neat and tidy appearance. This is a key management aim for this habitat type.	N/A	Avoidance of mowing when ground is wet/damp. Remediation of damaged areas of grassland through supplementary seeding.
F	Cover of bracken <i>Pteridium aquilinum</i> less than 20%.	Yes	1		N/A	Mowing management will reduce bracken cover, although bracken is unlikely to be present on this site.
G	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA).	Yes	1		N/A	Pulling and/or chemical control of invasive plant species, as needed.

## Additional Management Prescriptions (GL-B01)

The habitat is to be maintained as close-mown amenity grass for recreational use and access by residents. During maintenance visits, litter shall be removed from grasslands and disposed offsite to a suitably licensed landfill.

## Grassland (Low Distinctiveness)

### Creation, Enhancement and Management Detailed Methods (GL-T02)

Action	Relevant Parcels	Timing	Prescriptions
Sowing of modified grasslands.	1	Prior to the end of the construction phase (before Year 1) (April/May or September).	<p>The required ground shall be levelled and a seed bed created by harrowing. Once a seed bed is prepared the seed shall be surface sown and broadcast by machine (do not drill). The seed shall not be incorporated or covered to any depth but rolled to firm and obtain good soil/seed contact. Sowing rates shall follow the supplier's recommendation.</p> <p>The time for sowing must be assessed on Site and determined by the soil conditions. Ideally sowing shall take place in autumn or spring but can occur at other times if there is sufficient moisture and warmth – advice shall be sought from the Project Ecologist.</p>
Establishment of modified grasslands.	1	Year 1 (April to August)	<p>In good growing conditions (warm soils and adequate rainfall) and during the correct season, the sward is anticipated to establish and require its first management around 6-10 weeks from sowing, by which time the sward would have reached around 50mm to 100mm in height.</p> <p>Cutting operations of modified grasslands shall comprise:</p> <ul style="list-style-type: none"> <li>• Approximately 6x to 8x cuts shall be undertaken when the soil is relatively dry between April to August;</li> <li>• Litter, debris and stones and earth clods larger than 50mm in any dimension shall be removed prior to each cut;</li> <li>• Arisings shall be removed from Site or located within an appropriate area as designated by the Land Manager.</li> </ul> <p>Undertake establishment cutting in Year 2 if necessary.</p>
Long term mowing regimes – moderate condition grasslands.	1	Years 2-30 (March/April to September).	<p>The long-term mowing regimes for modified grasslands shall be undertaken following the operations prescribed below:</p> <ul style="list-style-type: none"> <li>• Annual cuts as required to maintain short-sward grassland, between March/April to August;</li> <li>• Arisings shall be removed from Site or located within an appropriate area designated by the Land Manager.</li> </ul>
Control of undesirable weeds.	1	Years 1-30 (April to August)	Undesirable weeds will be removed manually where feasible to do so, in the first instance. Where not feasible then glyphosate can be treated with an approved herbicide (such as a Glyphosate based herbicide) applied through a "weed wiper" or "weed wand" or other similar and approved technique for ensuring that the herbicide affects only the target species. Scope and targets for the control of undesirable weeds shall be informed following each monitoring period.
Control of invasive plant species.	1	Years 1-30 (April to September)	Where invasive plant species are identified following monitoring periods, the Project Ecologist shall devise a bespoke remedial strategy for the eradication or control of the specific invasive plant species in question. The remedial strategy shall be implemented in full by the Land Manager.
Supplementary seeding.	1	Years 1-30 (April/May or September)	Any disturbance/damage to modified grassland caused by machinery, vehicle or pedestrian damage etc. shall be remedied by the restoration of the seed bed and over-sowing of the prescribed seed mix. Scope and targets for supplementary seeding shall be informed following each monitoring period.

		<p>The affected ground shall be levelled and a seed bed created by harrowing. Once a seed bed is prepared the seed shall be surface sown and broadcast by machine (do not drill). The seed shall not be incorporated or covered to any depth but rolled to firm and obtain good soil/seed contact. Sowing rates shall follow the supplier's recommendation.</p> <p>The time for sowing must be assessed on Site and determined by the soil conditions. Ideally sowing shall take place in autumn or spring but can occur at other times if there is sufficient moisture and warmth – advice shall be sought from the Project Ecologist.</p> <p>Seed mix to follow the specification at the end of this document or as advised by the Project Ecologist.</p>
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## Supporting Information (GL-B02)

Seed mix in accordance with approved soft landscape design – EL1 Flowering Lawn Mix.

**Wild Flowers – 20%**

1.00% *Achillea millefolium* – Yarrow

1.00% *Anthyllis vulneraria* – Kidney Vetch

0.40% *Betonica officinalis* – Betony

1.50% *Centurea nigra* – Common Knapweed

0.40% *Galium album* – Hedge Bedstraw

1.50% *Galium verum* – Lady's Bedstraw

0.40% *Knautia arvensis* – Field Scabious

0.50% *Leontodon hispidus* – Rough Hawkbit

1.00% *Leucanthemum vulgare* – Oxeye Daisy

1.00% *Medicago lupulina* – Black Medick

0.40% *Plantago lanceolata* – Ribwort Plantain

2.00% *Plantago media* – Hoary Plantain

2.00% *Primula veris* – Cowslip

0.40% *Prunella vulgaris* – Selfheal

0.40% *Ranunculus acris* – Meadow Buttercup

1.60% *Ranunculus bulbosus* – Bulbous Buttercup

4.00% *Trifolium repens* – White Clover (ag)

Grasses - 80%

8.00% *Agrostis capillaris* - Common Bent

28.00% *Cynosurus cristatus* - Crested Dogstail

24.00% *Festuca rubra* - Red Fescue

4.00% *Phleum bertolonii* - Smaller Cat's-tail

16.00% *Poa pratensis* - Smooth-stalked Meadow-grass

# Grassland (Medium, High, and Very High Distinctiveness)

## Creation, Enhancement and Management Summary (GH-T01)

Provide details of the approach to delivering each of the targeted condition criteria and habitat. Conditions from Statutory Biodiversity Metric habitat condition assessment sheets – Sheet 6. Grassland Med High and V. High.

Target Habitat			Other neutral grassland			
Condition Assessment Criteria		Targeted	Relevant Parcels	Creation Approach	Enhancement Approach	Management Approach
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type.  <b>Note – this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.</b>	No	N/A	N/A.	N/A	
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	No	N/A	N/A	N/A	N/A
C	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	Yes	3	The habitat will be seeded to allow bare patches of between 1% and 5% to establish within the habitat.	N/A	Avoidance of mowing when ground is wet/damp. Remediation of damaged areas of grassland through supplementary seeding.
D	Cover of bracken <i>Pteridium aquilinum</i> less than 20% and cover of scrub (including bramble) less than 5%.	Yes	3	N/A	N/A	Low intensity mowing of grassland to manage scrub encroachment and chemical control of bracken, as needed.
E	Combined cover of species indicative of suboptimal condition and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging activities) accounts for less than 5% of total area.  If any invasive non-native species (as listed on Schedule 9 of WCA) are present, this criterion is automatically failed.	Yes	3	N/A	N/A	Avoidance of mowing when ground is wet/damp. Remediation of damaged areas of grassland through supplementary seeding. Low intensity mowing of grassland and chemical control of invasive plant species (informed by monitoring inspections), as needed.

F	There are 10 or more vascular plant species per m <sup>2</sup> present, including forbs that are characteristic of the habitat type.  <b>Note – this criterion is essential for achieving Good condition for non-acid grassland types only.</b>	No	N/A	N/A	N/A	N/A.
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#### Additional Management Prescriptions (GH-B01)

During maintenance visits, litter shall be removed from grasslands and disposed offsite to a suitably licensed landfill.

## Grassland (Medium, High, and Very High Distinctiveness)

### Creation, Enhancement and Management Detailed Methods (GH-T02)

Action	Relevant Parcels	Timing	Prescriptions
Creation of neutral grasslands.	3	August to September Year 0	<p>If required, spray off undesirable plants, rest for 2 weeks.</p> <p>The required ground shall be levelled and a seed bed created by harrowing. Once a seed bed is prepared the seed shall be surface sown and broadcast by machine (do not drill). The seed shall not be incorporated or covered to any depth but rolled to firm and obtain good soil/seed contact. Sowing rates shall follow the supplier's recommendation.</p> <p>The time for sowing must be assessed on Site and determined by the soil conditions. Ideally sowing shall take place in autumn or spring but can occur at other times if there is sufficient moisture and warmth – advice shall be sought from the Project Ecologist or Landscape Architect.</p>
Long term mowing of neutral grasslands.	3	Years 1-30 (March/April & September/October)	<p>Long term mowing operations of neutral grasslands shall comprise:</p> <ul style="list-style-type: none"> <li>• Two annual cuts shall be undertaken, one in March/April and one in September/October;</li> <li>• Cutting bar shall be set to a height of approximately 150mm above ground level;</li> <li>• Litter and debris shall be removed prior to each cut;</li> <li>• Arisings shall be removed from site or located within an appropriate area designated by the Land Manager.</li> </ul> <p>Mowing shall be undertaken across all neutral grassland areas, to ensure the continuity of good management and minimise the encroachment of scrub, bracken, undesirable weeds and invasive plant species.</p> <p>Mowing shall not be undertaken when the ground is overly wet or boggy, to prevent damage to the sward.</p>
Control of undesirable weeds.	3	Years 1-30 (April to August)	Undesirable weeds shall be treated through hand pulling only, no herbicide to be used. Scope and targets for the control of undesirable weeds shall be informed following each monitoring period.
Control of invasive plant species.	3	Years 1-30 (April to September)	Where invasive plant species are identified following monitoring periods, the Project Ecologist shall devise a bespoke remedial strategy for the eradication or control of the specific invasive plant species in question. The remedial strategy shall be implemented in full by the Land Manager.
Supplementary seeding.	3	Years 1-30 (April/May or September)	Any disturbance/damage to neutral grasslands caused by machinery, vehicle or pedestrian damage etc. shall be remedied by the restoration of the seed bed and

		<p>over-sowing of the prescribed seed mix. Scope and targets for supplementary seeding shall be informed following each monitoring period.</p> <p>The affected ground shall be levelled and a seed bed created by harrowing. Once a seed bed is prepared the seed shall be surface sown and broadcast by machine (do not drill). The seed shall not be incorporated or covered to any depth but rolled to firm and obtain good soil/seed contact. Sowing rates shall follow the supplier's recommendation.</p> <p>The time for sowing must be assessed on Site and determined by the soil conditions. Ideally sowing shall take place in autumn or spring but can occur at other times if there is sufficient moisture and warmth – advice shall be sought from the Project Ecologist or Landscape Architect.</p>
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## Other Supporting Information

### Supporting Information (GH-B02)

Seed mix for neutral grasslands to be Emorsgate EM3 Special General-Purpose Meadow Mixture.

0.50% *Achillea millefolium* – Yarrow

0.70% *Agrimonia eupatoria* – Agrimony

1.20% *Betonica officinalis* – Betony

2.00% *Centaurea nigra* – Common Knapweed

1.00% *Daucus carota* – Wild Carrot

0.80% *Echium vulgare* – Viper's-bugloss

0.20% *Filipendula ulmaria* – Meadowsweet

0.80% *Galium album* – Hedge Bedstraw

0.30% *Galium verum* – Lady's Bedstraw

0.40% *Geranium pratense* – Meadow Crane's-bill

0.10% *Lathyrus pratensis* – Meadow Vetchling

1.00% *Leucanthemum vulgare* – Oxeye Daisy

0.10% *Lotus corniculatus* – Birdsfoot Trefoil

1.00% *Malva moschata* – Musk Mallow

0.40% *Medicago lupulina* – Black Medick

0.20% *Onobrychis viciifolia* – Sainfoin

0.20% *Pastinaca sativa* – Wild Parsnip

1.40% *Plantago lanceolata* – Ribwort Plantain

0.60% *Poterium sanguisorba* ssp *sanguisorba* – Salad Burnet

1.00% *Primula veris* – Cowslip

1.50% *Prunella vulgaris* – Selfheal

1.50% *Ranunculus acris* – Meadow Buttercup

0.20% *Ranunculus bulbosus* – Bulbous Buttercup

0.30% *Rumex acetosa* – Common Sorrel

0.40% *Scabiosa columbaria* – Small Scabious

0.80% *Silene dioica* – Red Campion

1.00% *Silene vulgaris* – Bladder Campion

0.20% *Taraxacum officinale* – Dandelion

0.20% *Vicia cracca* – Tufted Vetch

**Grasses 80%**

8.00% *Agrostis capillaris* – Common Bent

28.00% *Cynosurus cristatus* – Crested Dogstail

24.00% *Festuca rubra* – Red Fescue

4.00% *Phleum bertolonii* – Smaller Cat's-tail

16.00% *Poa pratensis* – Smooth-stalked Meadow-grass

## Hedgerow (High Distinctiveness)

### Creation, Enhancement and Management Detailed Methods (HD-T01)

Target Hedgerow Type:		Species-rich native hedgerow and species-rich native hedgerow with trees.				
Condition Assessment Criteria		Targeted?	Relevant Features	Creation Approach	Enhancement Approach	Management Approach
A1 Height >1.5m average along length.		No	N/A	N/A	N/A	Hedgerows will be managed to a minimum height of 2m.
A2 Width >1.5m average along length.		Yes	H1, H2 H3 and H4	N/A	N/A	Hedgerows will be managed to a minimum width of 1.5 ideally 2m+.
B1 Gap – hedge base Gap between ground and base of canopy <0.5m for >90% of length.		Yes	H1, H2 H3 and H4	N/A	N/A	Low intensity hedgerow management to provide full and dense vertical canopy structures.
B2 Gap – hedgerow canopy continuity Gaps make up <10% of total length; and no canopy gaps >5m.		Yes	H1, H2 H3 and H4	Hedgerows shrubs and trees close planted to create full and dense horizontal canopy structures.	N/A	Low intensity hedgerow management to provide full and dense horizontal canopy structures.  Replacement of failed trees and shrubs to specification.
C1 Undisturbed ground and perennial vegetation  >1m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: <ul style="list-style-type: none"><li>measured from outer edge of hedgerow, and</li><li>is present on one side of the hedge (at least)</li></ul>		No	H1, H2 H3 and H4	New grasslands created on land up to new and existing hedgerows.	N/A	Low intensity management of grassland hedgerow margins.
C2 Nutrient-enriched perennial vegetation  Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.		Yes	H4	N/A	N/A	Low intensity management of grassland hedgerow margins.  Chemical or manual control of undesirable species as required in response to monitoring.

D1	Invasive and neophyte species  >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA) and recently introduced species.	Yes	H1, H2 H3 and H4	N/A	N/A	Appropriate control of invasive plant species, informed by monitoring inspections.
D2	Current damage  >90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	No	N/A	N/A	N/A	Replacement of failed shrubs to specification.  Low intensity management of grassland hedgerow margins wherever possible (relevant to H4 only).
E1	Tree class (applicable to hedgerows with trees only)  There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient), and there is on average at least one mature, ancient or veteran tree present per 20 – 50m of hedgerow.	No	N/A	New standard tree planting within selected hedgerows.	N/A	Trees will be managed to achieve this criterion, in the long term however, as this is a newly created hedgerow, there will be no possibility to achieve more than one age class of tree, this is therefore not targeted within the HMMP.
E2	E2. Tree health (applicable to hedgerows with trees only)  At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). 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.	Yes	H1 and H2 only	New standard tree planting within selected hedgerows.	N/A	Appropriate control of pests and diseases, informed by monitoring inspections.  Replacement of failed trees and shrubs to specification.

#### Additional Management Prescriptions (HD-B01)

Litter shall be picked from hedgerows and removed offsite, during maintenance visits.

Management works to hedgerows shall not be undertaken during the bird nesting season (generally recognised as March to August inclusive). Hedgerows shall be cut during January or February wherever possible to reduce the removal of berry crop overwintering food sources.

## Hedgerow

### Creation, Enhancement and Management Methods (HD-T02)

Action	Relevant Features	Timing	Prescriptions
Hedgerow planting – general.	H1 – H4	Prior to the end of the construction phase (before Year 1) (November to February)	<p>All landscape soft works are to be carried out in accordance with BS4428: 'Code of Practice for General Landscape Operations' and BS 3936: 1992 'Recommendations for Cultivations and Planting in the Advanced Nursery Stock category'. Works should be carried out at the appropriate season and only in appropriate weather conditions.</p> <p>Planting areas will be set out as needed.</p>
Planting of new hedgerows.	H1 – H4	Prior to the end of the construction phase (before Year 1) (November to February)	<p>Prior to planting, remove all debris and stones over 50mm diameter along the planting length. Carry out weed control as necessary</p> <p>All hedging plants with the exception of holly shall be planted as 1+1 transplants in rows @4 plants per linear metre, set out in double staggered rows 50cm apart. Holly will be planted using 2 litre stock. Species shall be planted in groups of three and five plants. Plant each shrub upright within a slit, carefully replacing any backfill and heel well in. Add a minimum of 2kg of compost (well-rotted spent horse manure) to the backfill material for each shrub during planting and mix well into backfill. Water to field capacity. Stake whips and protect with rabbit guards. Mulch planted lines to 75mm depth</p> <p>Where gapping up is necessary, changes to cutting frequencies, timings and methods will be required. Review and change use of machinery and equipment if deemed appropriate.</p>
Planting of new trees within new hedgerows.	H1 and H2 only	Prior to the end of the construction phase (before Year 1) (November to February)	<p>Individual tree pits must be dug to be of dimensions sufficient to contain the root ball with an additional 5cm around for backfill material. Loosen the base and mix excavated material with 2kg of well-rotted manure. Excavate the pit bottoms with a slightly raised centre to spade depth. Scarify the pit sides. Place tree with roots spread throughout the pit with the good side of the plant facing to the front.</p> <p>For support, install a single vertical stake on the windward side, close to the tree position, driven in at least 300mm into bottom of pit. Secure the tree firmly but not rigidly to the stake within 25mm of the top of the stake with a tie. Prevent the tree from touching the stake using spacer blocks or cushions if required. Fasten the tie to the stake using galvanised nails to BS1202-1.</p> <p>Backfill and firm down. Install growth tubes around each tree. Water to field capacity. Mulch to 75mm depth around each tree. If mulching is insufficient weed control, additional control can be carried out by periodic herbicide spraying at intervals to be agreed with the Land Manager.</p>
Establishment period for hedgerow shrubs and hedgerow trees.	H1 – H4	Years 1-5	<p>A minimum of two maintenance visits shall be made annually during each establishment year in spring and autumn. Any failures in planting, defects due to materials or workmanship not in accordance with the Contract shall be rectified, excluding theft or malicious damage. Failed trees/shrubs shall be replaced with the equivalent plants after completion; replacements to either match the size of adjacent or nearby plants of same species or match the original specification, whichever is the greater.</p> <p>All failures must be made good during the planting season/or the next planting season.</p> <p>Precautions: Ensure that trees/shrubs are not damaged using mowers, nylon filament rotary cutters and similar powered tools during maintenance activities.</p> <p>The following works shall be undertaken to trees/shrubs during the establishment period:</p> <ul style="list-style-type: none"> <li>• Top up total cover of mulch to specified depth annually in March;</li> <li>• Water all new trees/shrubs in the growing season during April to September as necessary to ensure effective establishment and growth;</li> <li>• Replace failed trees/shrubs to specified requirements during November to February.</li> </ul>

			<ul style="list-style-type: none"> <li>• Maintain a weed free area around each tree/shrub during the growing season April to September - diameter (minimum): the larger of 1m or the surface of original planting pit;</li> <li>• Gently firm loosened soil around trees/shrubs, straighten leaning trees/shrubs;</li> <li>• Tree/shrub accessories: Check the condition of stakes, ties, guys, guards. Replace broken or missing items. Re-firm loose stakes in the ground or replace as necessary to provide support to the tree/shrub. Adjust ties to accommodate growth and prevent constriction or abrasion. If bark damage has occurred cut back neatly with sharp knife and adjust to prevent further damage. Stakes and ties are to be removed when the trees/shrubs are fully established (at Year 5);</li> <li>• If necessary, prune to promote healthy growth and natural shape; removing dead, dying, diseased wood and suckers during the spring or autumn during the establishment period;</li> <li>• Firm in and straighten any trees/shrubs loosened and prune out dead, leggy and broken branches, without damage to natural habit of the plant;</li> <li>• Weed Control: Mulch will initially control weed growth around the new trees/shrubs. As this becomes incorporated into the soil further clearance may be necessary between trees/shrubs shall be carried out by mechanical means. Base of planting to be kept weed/grass free;</li> <li>• Remove windblown litter and other rubbish and fallen leaves;</li> <li>• Control pests and diseases as necessary.</li> </ul>
Long-term management of new hedgerows.	H1 – H4	Years 1-30 (November to February)	<p>Management works to hedgerows shall not be undertaken during the bird nesting season (generally) recognised as March to August inclusive. Hedgerows shall be cut during January or February wherever possible to reduce the removal of berry crop overwintering food sources.</p> <p>New hedgerows shall not be cut until a suitable canopy has developed – allow 3-5 years from planting.</p> <p>Hedgerows shall be cut using the following methods:</p> <ul style="list-style-type: none"> <li>• Allow hedges to grow to 2m height prior to cutting and maintain at that height, wherever possible cutting the canopy into an A-shape;</li> <li>• Cutting of hedgerows shall be undertaken to current best practice arboricultural methods (BS 3998:2012) ensuring clean and neat cut faces with no jagged ends, tears or scars. Wherever possible, tractor mounted rotary saws shall be used over flails;</li> <li>• Bushy basal growth shall be promoted to enhance screening functionality and biodiversity benefits;</li> <li>• Maintain newly planted sections as weed free by herbicide application/hand weeding as appropriate during the growing season. Remove dead weed arisings;</li> <li>• Remove windblown litter and other rubbish;</li> <li>• Prune shrubs as appropriate for the species to promote healthy bushy growth, flowering and stem effect;</li> <li>• Prune back long stems encroaching on paths and hard surfaces as necessary;</li> <li>• Control pests and diseases as necessary;</li> <li>• In the longer term, replace senescent plants or areas of failed plants to specified requirements as necessary to maintain effective hedgerow canopy cover.</li> </ul>
Replacement of failed trees and shrubs.	H1 – H4	Years 6-30 (November to February)	During the operational phase of the Scheme, failed trees and shrubs within hedgerows shall be replaced to specification maintain the ecological condition and integrity of these habitats, informed by monitoring inspections.
Control of invasive plant species (including non-native trees and shrubs).	H1-H4	Years 1-30 (April to September)	Where invasive plant species are identified during monitoring inspections, the Project Ecologist shall devise a bespoke remedial strategy for the eradication or control of the specific invasive plant species in question. The remedial strategy shall be implemented in full by the Land Manager.

## Hedgerow Species Lists (HD-T03)

Common Name	Scientific Name	Abundance / %	Comments
Field maple	<i>Acer campestre</i>	10	Transplants. Staggered rows every @4 per 1 metre.
Dogwood	<i>Cornus sanguinea</i>	15	Transplants. Staggered rows every @4 per 1 metre.
Hazel	<i>Corylus avellana</i>	25	Transplants. Staggered rows every @4 per 1 metre.
Hawthorn	<i>Crataegus monogyna</i>	25	Transplants. Staggered rows every @4 per 1 metre.
Holly	<i>Ilex aquifolium</i>	10	2 litre stock. Staggered rows every @4 per 1 metre
Guelder-rose	<i>Viburnum opulus</i>	15	Transplants. Staggered rows every @4 per 1 metre.

## Individual Trees

### Creation, Enhancement and Management Summary (UT-T01)

Target Habitat:		Urban trees in poor and moderate condition.				
Condition Assessment Criteria		Targeted	Relevant Features	Creation Approach	Enhancement Approach	Management Approach
A	The tree is a native species (or more than 70% within the block are native species).	Yes (T7, T12-T17 and T42-T46 only)	T7, T12-T17 and T42-T46	Twelve trees to be planted will be native.	N/A	Any failed native trees to be replaced with native specimens.
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Yes	All trees	Planted trees will be individually sited.	N/A	N/A
C	The tree is mature (or more than 50% within the block are mature).	No	N/A	N/A	N/A	Planted trees will not reach maturity during the management period.
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Yes	T2-T27 and T41	N/A	N/A	Likely to be possible for most trees. Allow natural growth of trees with minimal pruning management.
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	No	N/A	N/A	N/A	Planted trees unlikely to develop natural ecological niches during management period.
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Yes	T5-T27 and T41	Trees will be planted over grasslands, introduced shrub and perennial species.	N/A	Grassland habitat, shrubs or perennial species to be planted under trees as proscribed by the landscape plan. This will be managed to ensure at least 20% vegetative cover.

## Additional Management Prescriptions (UT-B01)

Tree pruning works shall not be undertaken during the bird nesting season (generally recognised as March to August inclusive).

## Individual Trees

### Creation, Enhancement and Management Detailed Methods (UT-T02)

Action	Relevant Features	Timing	Prescriptions
Tree planting – general.	T5-T52	Prior to the end of the construction phase (before Year 1) (November to February).	<p>All landscape soft works are to be carried out in accordance with BS4428: 'Code of Practice for General Landscape Operations' and BS 3936: 1992 'Recommendations for Cultivations and Planting in the Advanced Nursery Stock category'. Works should be carried out at the appropriate season and only in appropriate weather conditions.</p> <p>Prior to starting works, the contractor will verify locations of all services and obtain instruction if required.</p> <p>Planting areas as shown on the Approved Landscaping Strategy will be set out prior to planting.</p>
Tree planting – planting pits.	T5-T52	Prior to the end of the construction phase (before Year 1) (November to February).	<p>Tree stock will be heavy standards 350-425cm high.</p> <p>Individual tree pits shall be dug to be of dimensions sufficient to contain the root ball with an additional 5cm around for backfill material. Loosen the base and mix excavated material with 2kg of well-rotted manure. Excavate the pit bottoms with a slightly raised centre to spade depth. Scarify the pit sides. Place tree with roots spread throughout the pit with the good side of the plant facing to the front.</p> <p>For support, install a single vertical stake on the windward side, close to the tree position, driven in at least 300mm into bottom of pit. Secure the tree firmly but not rigidly to the stake within 25mm of the top of the stake with a tie. Prevent the tree from touching the stake using spacer blocks or cushions if required. Fasten the tie to the stake using galvanised nails to BS1202-1.</p> <p>Backfill and firm down. Install growth tubes around each tree. Water to field capacity. Mulch to 75mm depth around each tree. If mulching is insufficient weed control, additional control can be carried out by periodic herbicide spraying at intervals to be agreed with the Land Manager.</p>
Establishment period – trees.	T5-T52	Years 1-5	<p>A minimum of two maintenance visits shall be made annually during each establishment year in spring and autumn.</p> <p>Any failures in planting, defects due to materials or workmanship not in accordance with the Contract shall be rectified, excluding theft or malicious damage. Failed trees shall be replaced with the equivalent trees after completion; replacements to either match the size of adjacent or nearby plants of same species or match the original specification, whichever is the greater.</p> <p>All failures must be made good during the planting season/or the next planting season.</p> <p>Precautions: Ensure that trees are not damaged using mowers, nylon filament rotary cutters and similar powered tools during maintenance activities.</p> <p>The following works shall be undertaken to trees during the establishment period:</p> <ul style="list-style-type: none"> <li>• Top up total cover of mulch to specified depth annually in March;</li> <li>• Water all new trees in the growing season during April to September as necessary to ensure effective establishment and growth;</li> <li>• Replace failed trees to specified requirements during November to February.</li> <li>• Maintain a weed free area around each tree during the growing season April to September - diameter (minimum): the larger of 1m or the surface of original planting pit;</li> <li>• Gently firm loosened soil around trees, straighten leaning trees;</li> <li>• Tree accessories: Check the condition of stakes, ties, guys, guards. Replace broken or missing items. Re-firm loose stakes in the ground or replace as necessary to provide support to the tree. Adjust ties to accommodate growth and prevent constriction or abrasion. If bark damage has occurred cut back neatly with sharp knife and adjust to prevent further damage. Stakes and ties are to be removed when the trees are fully established (at Year 5);</li> </ul>

			<ul style="list-style-type: none"> <li>• If necessary, prune to promote healthy growth and natural shape; removing dead, dying, diseased wood and suckers during the spring or autumn during the establishment period;</li> <li>• Firm in and straighten any trees loosened and prune out dead, leggy and broken branches, without damage to natural habit of the plant;</li> <li>• Weed Control: Mulch will initially control weed growth around the new trees. As this becomes incorporated into the soil, further clearance may be necessary between trees shall be carried out by mechanical means. Base of tree to be kept weed/grass free;</li> <li>• Remove windblown litter and other rubbish and fallen leaves;</li> <li>• Control pests and diseases as necessary.</li> </ul>
Pruning regimes – trees.	T1-T52	Years 6-30 (November to February)	<p>Allow the natural growth and spread of new trees with minimal management, where this does not conflict with access or safety.</p> <p>Pruning of trees (only where required) shall be undertaken to current best practice arboricultural methods (BS 3998:2012) ensuring clean and neat cut faces with no jagged ends, tears or scars.</p>
Replacement of failed trees.	T1-T52	Years 6-30 (November to February)	During the operational phase of the Scheme, failed trees shall be replaced to specification to maintain the ecological condition and integrity of these habitats, informed by monitoring inspections.

## Individual Trees Species Lists (UT-T03)

Common Name	Scientific Name	Abundance / %	Comments
Serviceberry	<i>Amelanchier arborea 'Robin Hill'</i>	8.83%	Heavy standard. 12-14cm.
Field maple	<i>Acer campestre 'Elsrijk'</i>	8.83%	Heavy standard. 12-14cm
Silver birch	<i>Betula pendula</i>	11.76%	Heavy standard. 12-14cm
Hornbeam	<i>Carpinus betulus</i>	8.83%	Heavy standard. 12-14cm
Crab apple	<i>Malus 'Evereste'</i>	5.88%	Heavy standard. 12-14cm
Crab apple	<i>Malus 'Rudolph'</i>	2.94%	Heavy standard. 12-14cm
Callery pear	<i>Pyrus calleryana 'Autumn Blaze'</i>	8.83%	Heavy standard. 12-14cm
Bird cherry	<i>Prunus padus 'Albertii'</i>	5.88%	Heavy standard. 12-14cm
Whitebeam	<i>Sorbus aria 'Majestica'</i>	5.88%	Heavy standard. 12-14cm
Rowan	<i>Sorbus aucuparia 'Cardinal Royal'</i>	8.83%	Heavy standard. 12-14cm
Common lime	<i>Tilia cordata</i>	11.76%	Heavy standard. 12-14cm
Apple (British)	<i>Malus 'Discovery'</i>	2.94%	Half standard. 4-6cm on M106 rootstock.
Apple (British)	<i>Malus 'James Grieve'</i>	2.94%	Half standard. 4-6cm on M106 rootstock.
Apple (British)	<i>Malus 'Greensleeves'</i>	2.94%	Half standard. 4-6cm on M106 rootstock.
Apple (British)	<i>Malus 'Red Falstaff'</i>	2.94%	Half standard. 4-6cm on M106 rootstock.

## Habitat Creation and Management – Risk Register and Remedial Measures PM-T02

Provide a site-wide risk register associated with creating, enhancing and, or, managing each habitat type. Consider your approach to delivering the BNG targets in case the management prescriptions do not deliver as expected.

Risk Identification Date	Habitat Type	Risk Factor	Trigger for Action	Remedial Measure
N/A	Grassland – (modified grassland)	Grassland swards failing to establish.	Greater than 5% of total grassland areas failing to establish (Years 1 & 2).	Supplementary seeding of bare areas to specification. Consider changing seed mix if local conditions may be affecting sward establishment i.e. climatic conditions, soil chemistry.
N/A	Grassland –(modified grassland)	Increasing cover of undesirable weed species (i.e. docks, thistles, ragwort, nettles).	Professional judgement to be utilised following monitoring visits. Approx. trigger: undesirable weeds cover greater than 10% of total grassland areas (Years 1-30).	Increase weed control as per the management specifications. Changes to cutting frequencies and timings
N/A	Grassland –(modified grassland)	Increasing areas of scrub.	Scrub cover greater than 20% of total grassland areas (Years 1-30).	Regular annual topping (mowing) of grassland to reduce scrub cover.
N/A	Grassland –(modified grassland)	Increasing areas of damage and bare ground.	Physical damage cover greater than 5% of total grassland areas (Years 1-30).  Bare ground (including concentrations of rabbit warrens) cover greater than 10% of total grassland areas (Years 1-30).	Supplementary seeding of bare areas to specification. Identify sources of regular physical damage and apply preventive methods wherever possible.
N/A	Grassland –(other neutral grassland)	Grassland swards failing to establish.	Greater than 5% of total grassland areas failing to establish (Years 1 & 2).	Supplementary seeding of bare areas to specification. Consider changing seed mix if local conditions may be affecting sward establishment i.e. climatic conditions, soil chemistry.
N/A	Grassland –(other neutral grassland)	Increasing cover of undesirable weed species (i.e. docks, thistles, ragwort, nettles).	Professional judgement to be utilised following monitoring visits. Approx. trigger: undesirable weeds cover greater than 10% of total grassland areas (Years 1-30).	Review effectiveness of arisings removal. Changes to cutting frequencies and timings.
N/A	Grassland –(other neutral grassland)	Increasing areas of scrub.	Scrub cover greater than 5% of total grassland areas (Years 1-30).	Changes to cutting frequencies and timings.
N/A	Grassland –(other neutral grassland)	Increasing areas of damage and bare ground.	Physical damage cover greater than 5% of total grassland areas (Years 1-30).  Bare ground (including concentrations of rabbit warrens) cover greater than 5% of total grassland areas (Years 1-30).	Review use of cutting machinery and timings. Supplementary seeding of bare areas to specification. Identify sources of regular physical damage and apply preventive methods wherever possible.

N/A	Grassland –(other neutral grassland)	Lack of variation in sward height.	Target should be: At least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm (Years 1-30).	Review use of cutting machinery, frequencies and timings to vary sward height.
N/A	Grassland –(other neutral grassland)	Wildflowers becoming less evident in the sward in respect of frequency and density.	Professional judgement to be utilised following monitoring visits (NB good condition not targeted for this habitat).	Review effectiveness of arisings removal. Changes to cutting frequencies and timings. Supplementary overseeding/patch seeding to specification. Consider changing seed mix if local conditions may be affecting sward establishment i.e. climatic conditions, soil chemistry.
N/A	Grassland –(modified and other neutral grassland)	Damage to vegetation caused by continual flooding events	Grassland habitat not established due to continual flooding events. Professional judgement to be utilised following monitoring visits (NB good condition not targeted for this habitat).	Seed mix to be changed to wet grassland/floodplain meadow mix. For instance, EM8 Meadow Mixture for Wetlands.
N/A	Individual trees and hedgerows	Newly planted trees and shrubs failing to establish. Damage from pests and diseases (particularly grey squirrels).	Greater than 10% of failed trees/shrubs in planting areas and lines (Years 1-30).	Replace failed trees and shrubs like for like and to specification. Consider changing tree and shrub species if local conditions may be affecting establishment i.e. climatic conditions, soil chemistry. Control pests and diseases where possible - pruning of damaged branches if appropriate.
N/A	Hedgerows	Mechanical damage to hedgerows and poor hedgerow canopy structure and density.	Professional judgement to be utilised following monitoring visits (i.e. hedgerows to be 3m+ height with full and dense horizontal and vertical structures).	Changes to cutting frequencies, timings and methods. Review and change use of machinery and equipment.

### 3. Monitoring Schedule

To deliver BNG, a robust strategy is critical to monitor successes and challenges. Routine monitoring informs progress and facilitates the required management plan updates at set intervals.

#### Monitoring Strategy

##### Provide details of the monitoring strategy to encourage successful implementation of the management plan (MS-B01)

The monitoring strategy shall be undertaken as set out below to determine whether habitats are on target to reach the prescribed target conditions as set out within this HMMP, based on individual condition criteria for the specific habitat type. Methods of monitoring will include collating species lists and quantitative assessments (including area and cover estimates) to check against prescribed condition criteria. Photographs will be taken during each monitoring visit to document the development of habitats.

#### Monitoring Methods and Intervals MS-T01

Provide details of the methods you will use to adequately monitor the progress towards the targets stated in the management plan and as agreed with the Local Planning Authority.

Habitat Type	Monitoring Methods	Monitoring Interval and Timing
All grassland habitat types.	<p>To be undertaken across all parcels/habitat areas.</p> <p>Collect a botanical species list across grassland to check against target species list. Undertake quadrat sampling to identify the habitat type that is establishing and then number of species per m<sup>2</sup>.</p> <p>Estimate percentage of bare ground, physical damage, scrub (including bramble) and bracken cover.</p> <p>Estimate percentage variations in sward height (where applicable).</p> <p>Where possible search for potential presence of invasive and non-native plant species (particularly if on Sch. 9 of W&amp;C Act 1981).</p>	<p>Years 1, 3 &amp; 5 (establishment).</p> <p>Then Years 10, 20, 30.</p> <p>Surveys to be completed between May and August.</p>
Individual trees	<p>To be undertaken across all parcels/habitat areas.</p> <p>Estimate the percentage of failed trees (to species, where possible).</p> <p>Estimate percentage cover of vegetation beneath tree canopies.</p> <p>Determine whether trees have been allowed to grow naturally (i.e. look for evidence of excessive pruning).</p>	<p>Years 1, 3 &amp; 5 (establishment).</p> <p>Then Years 10, 20, 30.</p> <p>Surveys to be completed between May and August.</p>
Hedgerows	<p>To be undertaken across new hedgerows.</p> <p>List number of native tree and shrub species.</p> <p>Estimate the percentage of failed trees and shrubs (to species, where possible).</p> <p>Estimate height and width of hedgerows.</p>	<p>Years 1, 3 &amp; 5 (establishment).</p> <p>Then Years 10, 20, 30.</p> <p>Surveys to be completed between May and August.</p>

Estimate percentage of horizontal gaps along hedgerow.  
Estimate size gap between ground and base of hedgerow canopy (target <0.5m for >90% of length).  
Estimate percentage of damage (i.e. from mechanical cutting) along hedgerow.  
Estimate width of vegetated hedgerow margin and percentage vegetated cover along hedgerow length.  
Estimate percentage cover of ruderal weeds, disturbed ground and damage along hedgerow margin.  
Where possible search for potential presence of invasive and non-native plant species (particularly if on Sch. 9 of W&C Act 1981).

## Monitoring Reports

Following completion of habitat creation and initial enhancement works, prepare for your monitoring report for the Local Planning Authority or Responsible Body. You should monitor each habitat type comprising the BNG project. Provide sufficient detail for the reviewing authority to assess the progress. The 'Monitoring Report Template' can help you do this. The requirements and regularity with which the monitoring reports are required are at the discretion of the LPA or Responsible Body. Prepare the monitoring requirements below.

### Monitoring Report Schedule MS-T02

Provide details of the person or organisation that will be responsible for submitting the monitoring reports. Also state the responsible organisation for receiving and reviewing the reports.

Organisation Responsible for Submitting the Monitoring Reports	Organisation Receiving and Responsible for Reviewing Reports
TBC	South Holland District Council

Provide details of when the monitoring surveys and reports will be undertaken and submitted. You can extend the table and adjust according to your required schedule.

Project Year	Month Report to be Submitted	Month Management Plan to be reviewed	Comments
Y1	July 2027	July 2027	Establishment phase.
Y3	July 2029	July 2029	Establishment phase.
Y5	July 2031	July 2031	Establishment phase.
Y10	July 2036	July 2036	Long-term management.
Y20	July 2046	July 2046	Long-term management.
Y30	July 2056	July 2056	Final monitoring report.

## Adaptive Management

### Summary of Adaptive Management Approaches (MS-B02)

The Land Manager shall employ a suitably qualified ecologist (SQE) to undertake the monitoring strategy as set out within this HMMP.

The SQE shall produce the Monitoring Reports following each monitoring visit as prescribed within this HMMP. The SQE shall ensure a consistent approach to monitoring and recording even if the named SQE changes, to ensure the data set is comparable year-on-year and thereby the development of habitats to prescribed target conditions can be robustly monitored.

Where significant changes to the management approach have been identified by the SQE (i.e. significant failure of newly planted trees or grassland sward development, presence of invasive plant species), these will be discussed directly with the LandManager and responsible authority with appropriate remedial measures devised, prior to issuing the Monitoring Report. Where necessary and proportionate, site visits will be undertaken between all parties.

The LandManager and persons/organisations responsible for implementing the day-to-day management set out within this HMMP shall be familiarised with the management targets for each habitat and will duly report to the SQE constraints, challenges, issues and opportunities in meeting the said targets, to allow for iterative changes to the management approach as well as to inform Monitoring Reports.

All Monitoring Reports will be duly issued by the SQE to the LandManager and responsible authority for comment.

Where changes to existing management prescriptions have been identified following monitoring visits and/or comment from the responsible authority, the SQE shall duly update the HMMP to reflect the agreed changes to the management approach and targets. Such changes shall be clearly explained by the SQE to the LandManager and persons/organisations responsible for implementing the day-to-day management, utilising site visits where necessary and proportionate. The SQE shall also adapt the monitoring strategy as appropriate to assess the efficacy of changes to the management approach. The amended HMMP shall be duly issued to the LandManager and responsible authority by the SQE.

The efficacy of changes to the management approach shall be reported by the SQE following the subsequent agreed monitoring visits, following the process described above.