

OUTLINE

Habitat Management and Monitoring Plan

Site Name:	North East Stevenage
Date:	01/12/2025
Version:	CSA/0993/07



Author:



Client:

Picture Estates Limited

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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
CSA/0993/07		RG / TBC.2025	JW /TBC.2025

Document Details

Provide ownership, copyright and licensing information within this table.

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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	
Project type	On-site
Development Name and Address	North East Stevenage, Stevenage, Hertfordshire
BNG Project Name and Address	N/A
Author Organisation	CSA Environmental
Landowner	Picture Estates Limited
Land Manager	TBC
Responsible person/organisation for creating or enhancing the habitat	TBC
Period covered by this management plan	From commencement to the end of the 30-year period.
Planning authority	North Hertfordshire District Council
Planning reference (if applicable)	
BNG register reference (if applicable)	N/A
Central OS grid reference	TL 2627 2782
Metric revision/title	TBC
Are any Irreplaceable Habitats present onsite	Yes: ☒ No: ☐

Summary of Management Plan

Habitats to be Retained, Created and Enhanced PB-B02

Irreplaceable ancient woodland habitat is to be retained. High distinctiveness lowland mixed deciduous woodland (not of ancient origin) and species-rich native hedgerows associated with bank/ditch are to be retained.

Medium distinctiveness other broadleaved woodland, other neutral grassland, mixed scrub, non-priority pond, rural trees and species-rich hedgerows are to be retained on-site. Low distinctiveness modified grassland and native hedgerow habitats are also to be retained.

Other coniferous woodland is to be enhanced to other broadleaved woodland.

Medium distinctiveness other broadleaved woodland, other neutral grassland, mixed scrub, traditional orchard, priority pond, urban and rural trees are to be created on-site.

Other habitats to be created that do not require condition assessments and are not addressed in this report include buildings, built up areas and garden, allotments and developed land; sealed surface.

Timescales for Actions PB-B03

The management plan will cover a 30-year period following the commencement of the habitat creation. Habitat-specific timescales for establishment and management are set out herein. The exact commencement date of habitat creation works will be confirmed within the development-specific legal agreements.

Monitoring Requirements PB-B04

Monitoring visits will be undertaken regularly during initial establishment years (Years 1, 2, 3 and 5), then at a 5–10-year frequency thereafter (Years 10, 15, 25 and 30). Updated habitat and condition assessments will be undertaken to evaluate the success of habitat creation measures, alongside fixed-point photography.

Required Consents and Licences PB-B05

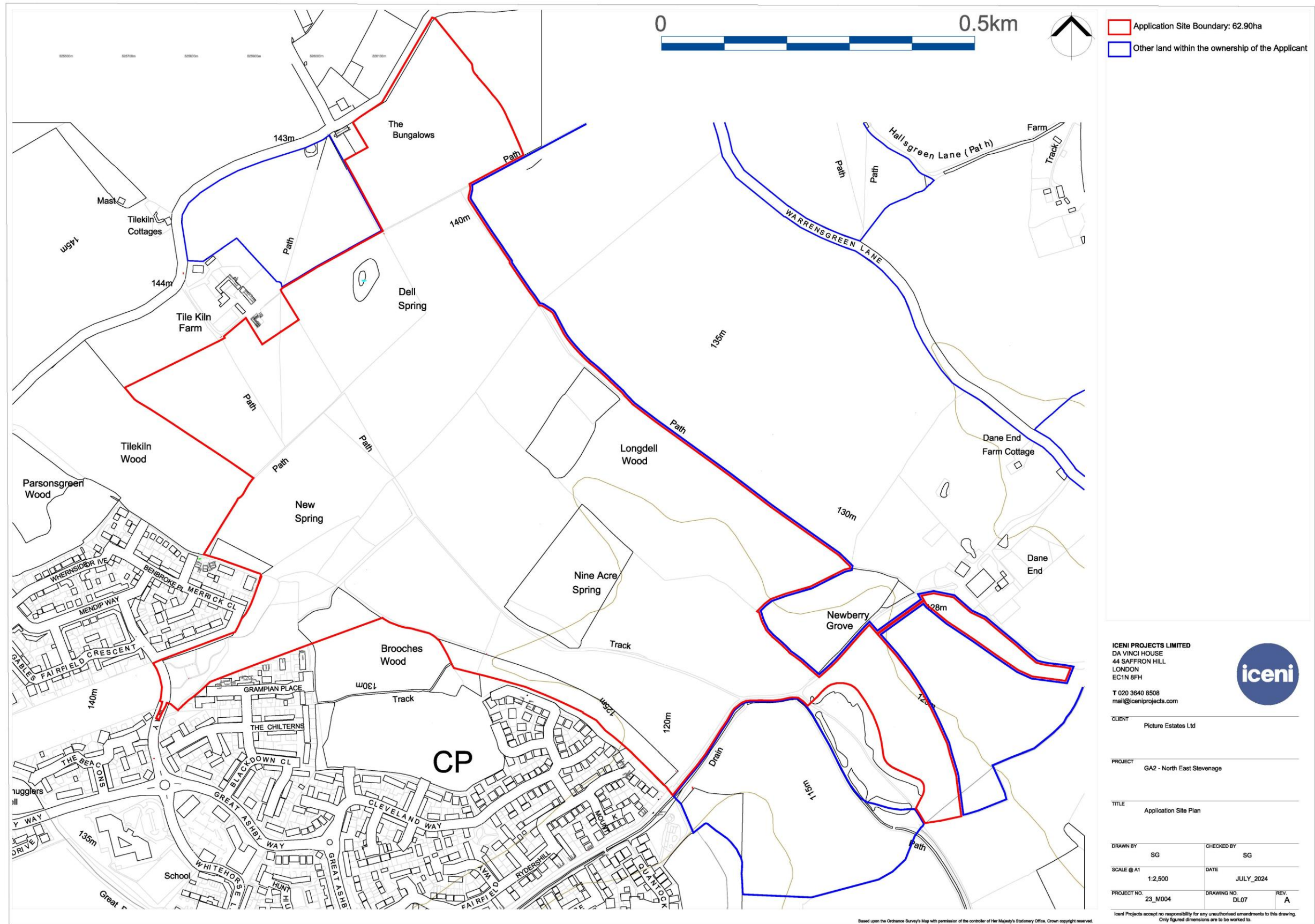
Planning permission

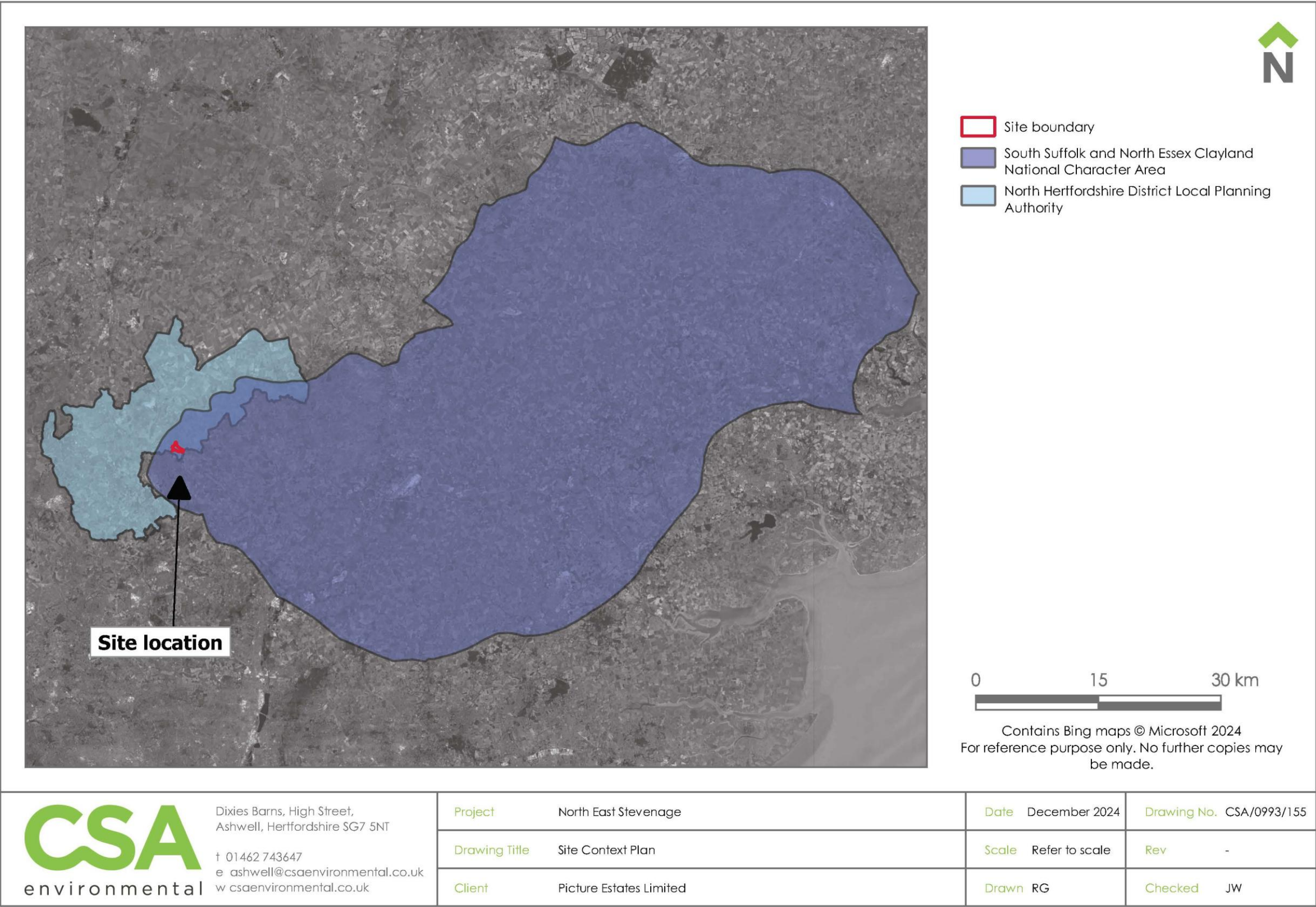
Funding PB-B06

TBC

Legal Agreement PB-B07

The delivery of the HMMP will be secured through a Section 106 agreement.





Phasing strategy

Will the proposed work measures be delivered in phases? PB-B08

Yes: ☒ No: ☐

Development will come forward phases with associated landscaping undertaken alongside these works. Dedicated areas for biodiversity delivery will be undertaken in initial phases to the peripheries of the Site.

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		Rhodri Gruffydd/Jamie Woollam		
Organisation		CSA Environmental		
Responsibility	Start Date:	TBC	End Date:	TBC

This HMMP has been produced by CSA Environmental on behalf of Picture Estates Limited. Baseline condition assessments, BNG assessment and the Statutory Biodiversity Metric have been completed by CSA Environmental. Advice and inputs into the scheme proposals have been provided by CSA from the outset. Responsibility for ongoing monitoring and advice throughout the implementation of the on-site habitat creation is to be determined.

Statement of Competency

This HMMP and associated BNG assessment has been completed by Rhodri Gruffydd and Matthew Dale, and reviewed by Jamie Woollam CEcol MCIEEM of CSA Environmental.

Rhodri Gruffydd and Matthew Dale are Ecologists with experience and knowledge of BNG, condition assessments and use of the Statutory Biodiversity Metric.

Jamie Woollam is a Director of Ecology at CSA Environmental with extensive experience in BNG and ecological assessment.

Landowner or Land Manager PB-B10

Name or Initials		TBC		
Organisation		Picture Estates Limited		
Responsibility	Start Date:	TBC	End Date:	TBC

Picture Estates Limited are the landowners and will be responsible for delivery of the on-site habitat creation, including appointing appropriately qualified management organisations/persons as necessary to undertake relevant roles.

Statement of Competency

Picture Estates Limited will engage with the management organisation/specialist contractors as necessary to facilitate specific works.

Management Organisation(s) Responsible for Implementing the HMMP PB-B11

Name or Initials		TBC		
Organisation		TBC		
Responsibility	Start Date:	TBC	End Date:	TBC

If a management organisation is appointed, it will be responsible for implementing the management tasks set out within this HMMP.

Statement of Competency

As above for Picture Estates Limited.

LPA or Responsible Body for Reviewing HMMP PB-B12

Name or Initials		TBC		
Organisation		North Hertfordshire District Council		
Responsibility	Start Date:	TBC	End Date:	TBC

TBC

Land Use Summary

Overview of Baseline Site Use PB-B13

The within the Site are currently in arable rotation. Habitats on-site include cereal crops; temporary grass and clover leys, lowland mixed deciduous woodland, other broadleaved woodland, other coniferous woodland, other neutral grassland, modified grassland, mixed scrub, developed land; sealed surface, non-priority ponds, individual trees and native hedgerows.

Woodlands are subject to existing management regime in respect of maintenance, with specific extractive or conservation aims.

Overview of Proposed Site Use PB-B14

Proposed land use at the Site includes residential areas comprising residential buildings, a primary school and associated playing fields, a community hall, children’s play areas, developed land; sealed surface roads and pedestrian/cycle paths, urban trees, allotments, and built-up areas and gardens.

Public open space at the Site comprises woodland, other neutral grassland, modified grassland, mixed scrub, traditional orchard, pond, rural trees and native hedgerows.

Site Context Photos PB-F03



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
Statutory / Non-statutory Designated Sites	Will your proposals lead to direct or indirect effects on designated sites?	☒	There are no anticipated effects of the proposals on international, national and local statutory designated sites. Impacts to non-statutory designated sites within/adjacent to the site boundary are anticipated during the construction and operational phases. Measures to mitigate these impacts are set out within the Ecology ES Chapter produced by CSA Environmental (CSA/993/ES Technical Chapter Template_Ecology).
Protected and Notable Species	Does the presence or proximity of specific species on or near your site present any constraints or opportunities to project design or management?	☒	Constraints to the project design or management have been identified for bats, birds and invertebrates in the ES Chapter with regard to protected/notable species. Measures to mitigate any impacts, in addition to any enhancement opportunities, are set out within the ES Chapter.
Invasive Non-Native Species (INNS)	Are any INNS present onsite that could affect the proposals?	☒	No INNS recorded within the Site.
Biological Records Plan - Sites and Species	Does the presence of designated sites or specific species on or near the site present any constraints or opportunities to proposals?	☒	As above, these are addressed in the ES Chapter.
Baseline Habitats Survey	Is this current and important HMMP information located in a separate document? If so, provide details on where it is located.	☒	The UKHab baseline habitats survey details can be found within the ES Chapter.
Public Access	Has public access, or proposals to allow public access, influenced your management prescriptions? If so, how?	☒	Proposals for the Site include public open spaces. Amenity spaces will be managed to accommodate recreational activities including creating habitats suitable for recreational use and additional protection measures where required.
Climate	Are local climate conditions and, or, climate change likely to impact the target habitat retention, creation or enhancement?	☒	Climate is not considered a constraint in relation to the habitat types proposed above the normal risks associated with weather and climate change.
Geology and Topography	Any geological or topographical constraints or opportunities?	☒	None identified.
Agricultural Land Status	Does the site support any land favourable for agricultural management? Could this affect the proposals?	☒	The Site supports Grade 3 ('good to moderate quality') agricultural land. However, there is abundant Grade 3 agricultural land in the surrounding area.
Soils and Substrates	Do soils and substrates present any constraints or opportunities?	☒	The majority of the Site has a soil type comprising 'Slightly acid loamy and clayey soils with impeded drainage'. The northern part of the Site has 'Lime-rich loamy and clayey soils with impeded drainage'. This should not constrain the proposed habitats at the Site. However, grassland may need additional considerations to prevent compaction and localised surface water.
Contaminated Land	If there is any contaminated land, will this present any constraints?	☒	No known constraints.
Hydrology and Drainage	Will the site hydrology present any constraints or opportunities?	☒	The Site has previously been in arable cultivation without any significant issues.
Flood Risk Zones	Is the site within a flood risk zone? Will that present any site management risks?	☒	The Site is in flood risk zone 1 and has no known constraints. Attenuation basins will be provided as part of the proposed development.

Landscape Character and Designations	Does the landscape character of the site present any constraints or opportunities?	☒	No known constraints.
Historic Land Use	Does the historic land use present any constraints or opportunities?	☒	No known constraints.
Historic Environment and Earth Heritage	Are there any historic environment designations? What are the implications for your plan?	☒	
Other – please specify	Any other details - for example underground services or overhead powerlines, which may impact habitat management.	☒	No known constraints.

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

Aims

- To achieve at least 10% biodiversity net gain on-site
- To create habitats that provide shelter and resources for wildlife, including protected species
- To create an open space that is a recreational destination – in order to discourage excessive recreation within ancient woodland habitats on/adjacent to the Site

Objectives

- To create other broadleaved woodland, other neutral grassland, mixed scrub, traditional orchard, priority pond, rural trees and native hedgerows in moderate condition, and create modified grassland and urban trees in poor condition
- To create a variety of habitats with structural variation that provide opportunities for wildlife to disperse, forage and shelter
- To provide species-rich habitats combined with an aesthetic landscaping design to encourage recreational use within certain areas of the Site

Detailed management prescriptions will be used to create woodland, grassland, scrub, orchard, pond, tree and hedgerow habitats within suitable timescales and allow the habitat conditions to be maintained for at least 30 years.

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

Baseline habitats include irreplaceable habitat in the form of five ancient semi-natural woodlands and are therefore removed from the baseline for BNG. These woodlands are to be retained in their entirety, with any mitigation measures addressed in the ES Chapter.

Woodland W6 (other broadleaved woodland) is within the Brooches Wood Local Wildlife Site (LWS) and, while there is no Local Nature Recovery Strategy (LNRS) yet in place for Hertfordshire, due to its non-statutory designation it is considered to be within the 'location ecologically desirable but not in local strategy' category.

W13 is lowland mixed deciduous woodland but not of ancient origin. This habitat is high distinctiveness but is to be retained.

All other baseline habitats are common habitats of very low to medium distinctiveness and considered to have low strategic significance.

The Site is suitable for woodland, grassland, scrub, traditional orchard and pond creation, as well as hedgerow and tree planting. Proposed habitats within public open spaces which will be subject to recreational activities and can therefore be maintained at the prescribed conditions. The proposed designs create ecotones and structural diversity which provide benefits for wildlife.

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
Other broadleaved woodland	Other broadleaved woodland	Woodland W6	Good	Good	N/A	TBC	
Cereal crops	Other broadleaved woodland	Field F11	N/A	Moderate	TBC	TBC	
Other coniferous woodland	Other broadleaved woodland	W10	Moderate	Moderate	TBC	TBC	
Cereal crops	Other neutral grassland	F11	N/A	Poor	Standard time to target condition from the statutory biodiversity metric (5 years).	TBC	
Other neutral grassland	Other neutral grassland	F2	Poor	Poor	N/A	TBC	
Cereal crops	Other neutral grassland	SuDS basins	N/A	Moderate	Standard time to target condition (5 years).	TBC	
Modified grassland	Modified grassland	F4	Moderate	Moderate	N/A	TBC	
Cereal crops	Modified grassland	Open spaces and verges in development parcels	N/A	Poor	Standard time to target condition (1 year).	TBC	
Mixed scrub	Mixed scrub	F4	Moderate	Moderate	N/A	TBC	
Cereal crops	Mixed scrub	Open spaces	N/A	Moderate	Standard time to target condition (5 years).	TBC	

Cereal crops	Traditional orchard	F1	N/A	Moderate	TBC	TBC	
Non-priority pond	Non-priority pond	F2	Moderate	Moderate	N/A	TBC	
Cereal crops	Priority pond	F11	N/A	Moderate	TBC	TBC	
Cereal crops	Rural tree	Open spaces	N/A	Poor	Standard time to target condition (27 years).	TBC	
Cereal crops	Urban tree	Development parcels	N/A	Poor	Standard time to target condition (10 years).	TBC	
Native hedgerows	Native hedgerows		Good	Good	N/A	TBC	
N/A	Native hedgerows		N/A	Moderate	TBC	TBC	

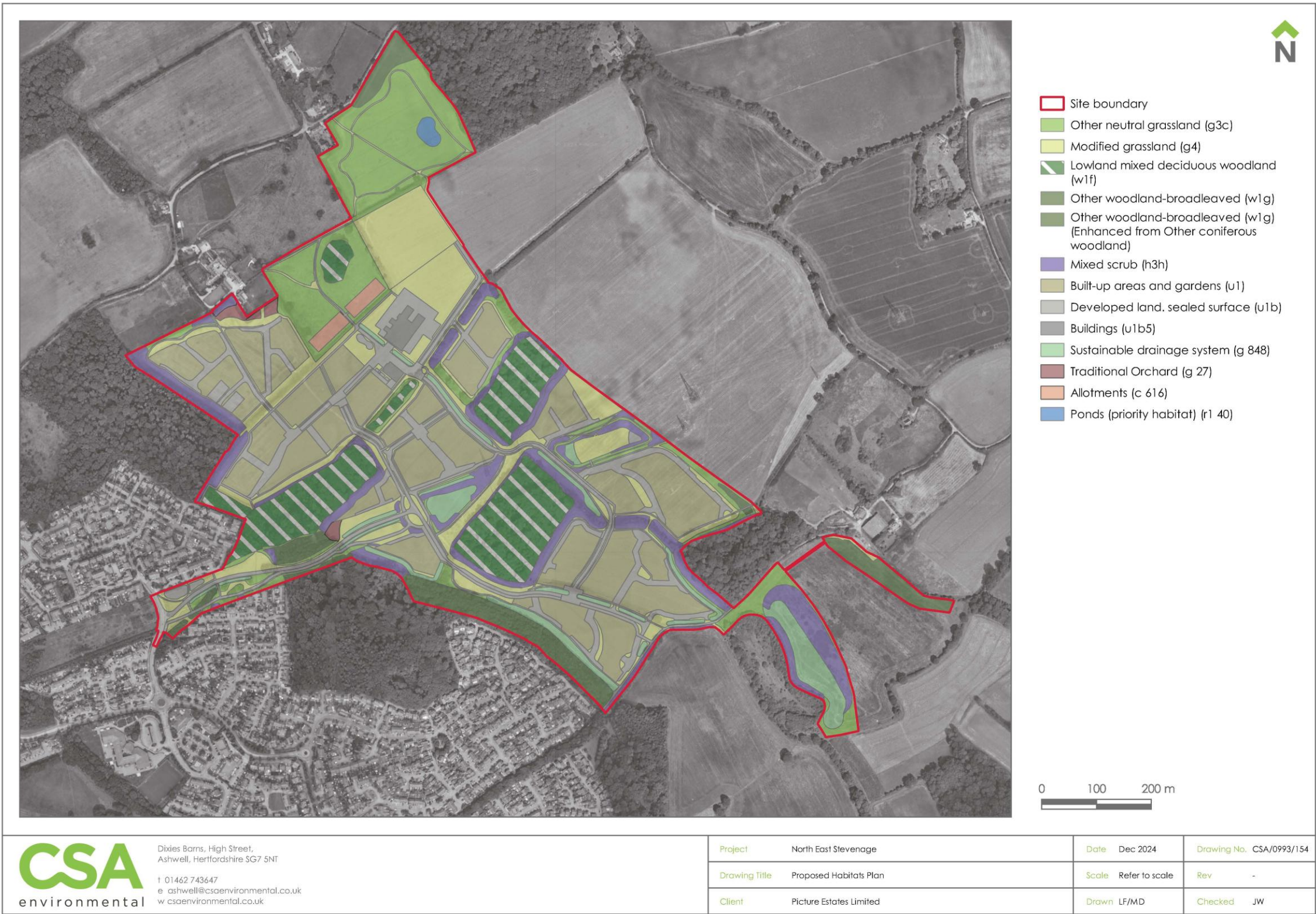
Habitat and Condition Targets Further Comments

Specific habitat condition assessment targets are to be confirmed.

Creation, Enhancement and Management Targets and Prescriptions

Habitat Creation, Enhancement and Management Plan EM-F01

The below plan shows the proposed habitats to be retained, enhanced and created on-site. Information regarding the target condition of each parcel is TBC.



Woodland

Creation, Enhancement and Management Summary (WO-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 24. Woodland

For each condition row, delete the condition targets that aren't being targeted as necessary.

Target Habitat:			Other broadleaved woodland (creation) - Moderate				
Condition Assessment Criteria			Target Score	Relevant Parcels	Creation Approach	Enhancement Approach	Management Approach
A	Age distribution of trees	Three age classes present	1	F11	-	-	-
		Two age classes present					
		One age class present					
B	Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland	2		Tree guards to be fitted to trees/shrubs as they grow to prevent damage by herbivores	-	-
		Evidence of significant browsing pressure is present in 40% or less of whole woodland					
		Evidence of significant browsing pressure is present in 40% or more of whole woodland					
C	Invasive plant species	No invasive species present in woodland	3		No invasive species will be included at the creation stage	-	Regular monitoring and removal of invasive species identified
		Rhododendron <i>Rhododendron ponticum</i> or cherry laurel <i>Prunus laurocerasus</i> not present, other invasive species <10% cover					
		Rhododendron or laurel present, or other invasive species) 10% cover					
D	Number of native trees species	Five or more native tree or shrub species found across woodland parcel	3	Species selected at the creation stage should include >5 native tree/shrub species	-	Monitoring ensuring at least 5 species have established in the woodland and measures to be taken to add them if this has not occurred	
		Three to four native tree or shrub species found across woodland parcel					
		Two or less native tree or shrub species present across woodland parcel					
E	Cover of native tree	>80% of canopy trees and >80% of understorey shrubs are native	3		-		

	and shrub species	50 – 80% of canopy trees and 50-80% of understorey shrubs are native <50% of canopy trees and <50% understorey shrubs are native			Species selected at the creation stage should comprise entirely of native species		Regular monitoring and removal of non-native species identified
F	Open space within woodland	10-20% of woodland has areas of temporary open space. Unless woodland <10ha in which case 0-20% temporary open space is permitted. 21-40% of woodland has areas of temporary open space <10% or >40% of woodland has areas of temporary open space. But if woodland <10ha has <10% temporary open space, please see Good category.	3		Parcel selected for woodland creation is <10ha, so no open space required for 'Good' condition to be met	-	-
G	Woodland regeneration	All three classes present in woodland; trees 4-7cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth One or two classes only present in woodland No classes or coppice regrowth present in woodland	1		-	-	-
H	Tree health	Tree mortality less than 10%, no pests or diseases and no crown dieback 11% to 25% mortality and/or crown dieback or low risk pest or disease present Greater than 25% tree mortality and or any high risk pest or disease present	3		-	-	Monitoring to identify pests/diseases, with measures implemented to remove these or remove infected trees if required
I	Vegetation and ground flora	Recognisable NVC plant community at ground layer present, strongly characterised by ancient woodland flora specialists. Recognisable NVC plant community at ground layer present No recognisable NVC plant community at ground layer present.	3		Ancient woodland flora specialists chosen at creation stage to make up the ground flora	-	Regular monitoring and removal of encroaching scrub/non-ancient woodland flora species to help the desired plant community to establish
J	Woodland vertical structure	Three or more storeys across all survey plots or a complex woodland. Two storeys across all survey plots One of less storey across all survey plots	1		-	-	-

K	Veteran trees	Two of more veteran per hectare	1		-	-	-
		One veteran tree per hectare					
		No veteran trees present in woodland					
L	Amount of deadwood	50% of all survey plots within the woodland parcel have deadwood, such as standing deadwood, large dead branches and or stems and stumps, or an abundance of small cavities.	1		-	-	-
		Between 25% and 50% of all survey plots within the woodland parcel have deadwood, such as standing deadwood, large dead branches and or steams, stubs and stumps, or an abundance of small cavities.					
		Less than 25% of all survey plots within the woodland parcel have deadwood, such as standing deadwood, large dead branches and or steams, stubs and stumps, or an abundance of small cavities.					
M	Woodland disturbance	No nutrient enrichment or damaged ground evident	1		-	-	-
		Less than 1 hectare in total of nutrient enrichment across woodland area and or less than 20% of woodland area has damaged ground					
		More than 1 hectare of nutrient enrichment and or more than 20% of woodland area has damaged ground					

Woodland

Creation, Enhancement and Management Detailed Methods (WO-T02)

Provide detailed prescriptions for the creation and management of the habitat.

Action	Relevant Parcels	Timing	Prescriptions
Year 0: Preparation and planting		November to March	Soil preparation – new planting into well-prepared ground following good horticultural practice including cultivation and scarification where appropriate. Ploughing of topsoil may be required if there is existing compaction. Planting - in dormant season (November to March) using a range of native species, mixed randomly. Planting density of <1000/ha. Planting should be in regular rows with scalloped edges. Protection - use of appropriate tree protection guards or fencing. Ground flora – sown with an appropriate shade-tolerant woodland mix as trees establish (Emorsgate EG9 Grass Mixture for Hedgerows and Woodland (or equivalent as available/appropriate)).
Year 1		Quarterly November to March October to November April to October	Quarterly inspection of tree guards/fencing and replacement if necessary. Replacement of failed planting as required, annual inspection and replanting in November to March. Annual formative pruning of young trees to encourage good growth and shape. Monthly cuts of grassland as required to maintain sward at 100mm during first growing season between April and October. Arisings collected and removed following each cut.
Year 2 - 4		Anytime November to March October to November	Annual inspection of tree guards and replacement if necessary. Replacement of failed planting as required, annual inspection and replanting in November to March. Annual formative pruning of young trees to encourage good growth and shape. Year 2 ground flora: continue monthly cuts as required to maintain 100mm sward between April and May. Arisings collected and removed following each cut. Followed by two cuts, one in late July and one in September, both to 100mm with arisings removed.
Year 5		Anytime November to March September to February	Annual inspection of tree guards and replacement if necessary. Replacement of failed planting as required, annual inspection and replanting in November to March. Selective thinning of 30% of woodland parcels in Year 5. Timing to avoid nesting bird season. Machinery use if ground conditions allow or using hand tools.
Year 6 - 14		Anytime November to March	Annual inspection of tree guards and replacement if necessary (until removed). Replacement of failed planting as required, annual inspection and replanting in November to March. Remove tree guards as appropriate (Years 10-15).
Year 15		September to February	Selective thinning of 30% of woodland parcels in Year 15. Timing to avoid nesting bird season. Machinery use if ground conditions allow or using hand tools.

Woodland Species Lists (WO-T03)

Woodland species lists are TBC

Common Name	Scientific Name	Abundance / %	Comments

What Does Success Look Like? (WO-F01)



Woodland

Creation, Enhancement and Management Summary (WO-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 24. Woodland

For each condition row, delete the condition targets that aren't being targeted as necessary.

Target Habitat:			Other broadleaved woodland (enhancement) - Moderate				
Condition Assessment Criteria			Target Score	Relevant Parcels	Creation Approach	Enhancement Approach	Management Approach
A		Three age classes present	2	W10	-	Maintaining the existing native broadleaved trees will keep some semi-	-

	Age distribution of trees	Two age classes present				mature tree which, along with the sapling that will be planted, will account for two age classes	
		One age class present					
B	Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland	2		-	Tree guards to be fitted to saplings to prevent damage by herbivores	-
		Evidence of significant browsing pressure is present in 40% or less of whole woodland					
		Evidence of significant browsing pressure is present in 40% or more of whole woodland					
C	Invasive plant species	No invasive species present in woodland	3		No invasive species are currently present, and enhancement measures should not introduce them	-	Regular monitoring and removal of invasive species identified – variegated yellow archangel is of particular concern as it was observed in an woodland adjacent to the Site during ecological surveys
		Rhododendron <i>Rhododendron ponticum</i> or cherry laurel <i>Prunus laurocerasus</i> not present, other invasive species <10% cover					
		Rhododendron or laurel present, or other invasive species) 10% cover					
D	Number of native trees species	Five or more native tree or shrub species found across woodland parcel	3		Six native tree/shrub species are currently present	Newly planted trees/shrubs should all be native, and should include at least 5 different species	-
		Three to four native tree or shrub species found across woodland parcel					
		Two or less native tree or shrub species present across woodland parcel					
E	Cover of native tree and shrub species	>80% of canopy trees and >80% of understorey shrubs are native	3		-	Removal of the majority of the Corsican pines should make the proportion of native trees >80%, The thinning of the canopy should help the native saplings to grow	Regular monitoring and removal of non-native species, especially pine saplings
		50 – 80% of canopy trees and 50-80% of understorey shrubs are native					
		<50% of canopy trees and <50% understorey shrubs are native					
F	Open space within woodland	10-20% of woodland has areas of temporary open space. Unless woodland <10ha in which case 0-20% temporary open space is permitted.	3		This parcel is <10ha, so no open space is required for ‘Good’ condition to be met	-	Tree guards should be fitted on saplings so they will not be killed by herbivore grazing so that no areas of open space are created
		21-40% of woodland has areas of temporary open space					
		<10% or >40% of woodland has areas of temporary open space.					

		But if woodland <10ha has <10% temporary open space, please see Good category.					
G	Woodland regeneration	All three classes present in woodland; trees 4-7cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth One or two classes only present in woodland No classes or coppice regrowth present in woodland	3		Trees 4-7cm DBH are already present	Coppicing of some existing trees (hazel and/or oak) Planting of seedlings/saplings	Tree guards should be fitted to saplings so they are not eaten by herbivores
H	Tree health	Tree mortality less than 10%, no pests or diseases and no crown dieback 11% to 25% mortality and/or crown dieback or low risk pest or disease present Greater than 25% tree mortality and or any high risk pest or disease present	1		-	-	-
I	Vegetation and ground flora	Recognisable NVC plant community at ground layer present, strongly characterised by ancient woodland flora specialists. Recognisable NVC plant community at ground layer present No recognisable NVC plant community at ground layer present.	3		Ancient woodland flora specialists chosen at creation stage to make up the ground flora	-	Regular monitoring and removal of encroaching scrub/non-ancient woodland flora species to help the desired plant community to establish
J	Woodland vertical structure	Three or more storeys across all survey plots or a complex woodland. Two storeys across all survey plots One or less storey across all survey plots	1		-	-	-
K	Veteran trees	Two or more veteran per hectare One veteran tree per hectare No veteran trees present in woodland	1		-	-	-
L	Amount of deadwood	50% of all survey plots within the woodland parcel have deadwood, such as standing deadwood, large dead branches and or stems and stumps, or an abundance of small cavities. Between 25% and 50% of all survey plots within the woodland parcel have deadwood, such as standing deadwood, large dead branches and or steams, stubs and stumps, or an abundance of small cavities.	3		Clear pine and cut wood from coppicing to be left in the woodland as deadwood	-	-

		Less than 25% of all survey plots within the woodland parcel have deadwood, such as standing deadwood, large dead branches and or steams, stubs and stumps, or an abundance of small cavities.					
M	Woodland disturbance	No nutrient enrichment or damaged ground evident	1		-	-	-
		Less than 1 hectare in total of nutrient enrichment across woodland area and or less than 20% of woodland area has damaged ground					
		More than 1 hectare of nutrient enrichment and or more than 20% of woodland area has damaged ground					

Woodland

Creation, Enhancement and Management Detailed Methods (WO-T02)

Provide detailed prescriptions for the creation and management of the habitat.

Action	Relevant Parcels	Timing	Prescriptions
Year 0: Preparation and planting		November to March	Soil preparation – new planting into well-prepared ground following good horticultural practice including cultivation and scarification where appropriate. Ploughing of topsoil may be required if there is existing compaction. Planting - in dormant season (November to March) using a range of native species, mixed randomly. Planting density of <1000/ha. Planting should be in regular rows with scalloped edges. Protection - use of appropriate tree protection guards or fencing. Ground flora – sown with an appropriate shade-tolerant woodland mix as trees establish: Emorsgate EG9 Grass Mixture for Hedgerows and Woodland (or equivalent as available/appropriate)
Year 1		Quarterly November to March October to November April to October	Quarterly inspection of tree guards/fencing and replacement if necessary. Replacement of failed planting as required, annual inspection and replanting in November to March. Annual formative pruning of young trees to encourage good growth and shape. Monthly cuts of grassland as required to maintain sward at 100mm during first growing season between April and October. Arisings collected and removed following each cut.
Year 2 - 4		Anytime November to March October to November	Annual inspection of tree guards and replacement if necessary. Replacement of failed planting as required, annual inspection and replanting in November to March. Annual formative pruning of young trees to encourage good growth and shape. Year 2 ground flora: continue monthly cuts as required to maintain 100mm sward between April and May. Arisings collected and removed following each cut. Followed by two cuts, one in late July and one in September, both to 100mm with arisings removed.
Year 5		Anytime November to March September to February	Annual inspection of tree guards and replacement if necessary. Replacement of failed planting as required, annual inspection and replanting in November to March. Selective thinning of 30% of woodland parcels in Year 5. Timing to avoid nesting bird season. Machinery use if ground conditions allow or using hand tools.
Year 6 - 14		Anytime November to March	Annual inspection of tree guards and replacement if necessary (until removed). Replacement of failed planting as required, annual inspection and replanting in November to March. Remove tree guards as appropriate (Years 10-15).
Year 15		September to February	Selective thinning of 30% of woodland parcels in Year 15. Timing to avoid nesting bird season. Machinery use if ground conditions allow or using hand tools.

Woodland Species Lists (WO-T03)

Woodland species lists are TBC

Common Name	Scientific Name	Abundance / %	Comments

What Does Success Look Like? (WO-F01)



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 (creation)			
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. Note – this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	No	F11	-	-	-
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		-	-	-
C	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	No		-	-	-
D	Cover of bracken <i>Pteridium aquilinum</i> less than 20% and cover of scrub (including bramble) less than 5%.	No		-	-	-
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.	No		-	-	-

F	There are 10 or more vascular plant species per m ² present, including forbs that are characteristic of the habitat type. Note – this criterion is essential for achieving Good condition for non-acid grassland types only.	No		-	-	-
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Creation, Enhancement and Management Detailed Methods (GH-T02)

Provide detailed prescriptions for the creation and management of the habitat.

Action	Relevant Parcels	Timing	Prescriptions
Other Neutral Grassland Creation			
Year 0: Preparation of soil, removal of weeds, sowing		Removal of weeds and soil preparation immediately prior to sowing in autumn or spring	Removal of weeds: Application of herbicide or, if this is not possible, ploughing in spring if dry enough and regular cultivation throughout the summer. Soil preparation: Light harrow to produce a medium tilth then roll to produce a fine, firm and level seedbed. Sowing: Broadcast of commercially sourced seed mix of local provenance, rolled to ensure good contact. Seed mix example provided below, with final product/mix to be confirmed prior to commencement. F11 - Emorsgate EM2 Standard General Purpose Meadow Mixture (or equivalent as available/appropriate)
Year 1: Initial management		April to October	Cutting of grassland once every 4-6 weeks as required to maintain sward at 100mm between April and October. Arisings removed following each cut.
Year 2: Allowing to set seed, cut and remove		July and September	Allow flowers to set seed and then two cuts – one in late July and one in September, both to 100mm with arisings removed.
Year 3 onwards: Cut and remove management		July and September	Two cuts each year – one in early-mid July and one in September, both to 100mm with arisings removed.

Grassland (Medium, High, and Very High Distinctiveness) Species Lists (GH-T03)

Open spaces

Example species list below.

Common Name	Scientific Name	Abundance / %	Comments
Yarrow	<i>Achillea millefolium</i>	0.5	
Common knapweed	<i>Centaurea nigra</i>	1.6	
Wild carrot	<i>Daucus carota</i>	3	
Lady’s bedstraw	<i>Galium verum</i>	3	
Field scabious	<i>Knautia arvensis</i>	0.3	
Rough hawkbit	<i>Leontodon hispidus</i>	0.3	
Oxeye daisy	<i>Leucanthemum vulgare</i>	2.5	
Musk mallow	<i>Malva moschata</i>	3	
Ribwort plantain	<i>Plantago lanceolata</i>	0.8	
Salad burnet	<i>Poterium sanguisorba ssp sanguisorba</i>	1	
Cowslip	<i>Primula veris</i>	0.6	
Selfheal	<i>Prunella vulgaris</i>	0.3	
Meadow buttercup	<i>Ranunculus acris</i>	0.8	
Yellow-rattle	<i>Rhinanthus minor</i>	1.2	
Common sorrel	<i>Rumex acetosa</i>	1.1	
Common bent	<i>Agrostis capillaris</i>	8	
Crested dog’s-tail	<i>Cynosurus cristatus</i>	40	
Red fescue	<i>Festuca rubra</i>	28	
Smaller cat’s-tail	<i>Phleum bertolonii</i>	4	

What Does Success Look Like? (GH-F01)



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 (creation) - Moderate		
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. Note – this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	Yes	SuDS	Seed mix characteristic of other neutral grassland selected	-	Monitoring of the area and implementation of appropriate measures if this condition declines (removal of non-characteristic flora)
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		-	-	-
C	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	No		-	-	-
D	Cover of bracken <i>Pteridium aquilinum</i> less than 20% and cover of scrub (including bramble) less than 5%.	Yes		Removal of bracken/scrub adjacent to this area (before grassland is established); no bracken or scrub included in selected seed mix	-	Monitoring and removal of bracken and scrub if encroaching
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		Removal of weeds immediately prior to seeding is expected to get rid of species indicative of suboptimal condition No invasive non-native species are currently present, and none should be introduced in the seed mix	-	The proposed cutting regime is expected to promote the growth of characteristic grassland flora, rather than species indicative of suboptimal condition Physical damage is not anticipated in these area as access will be discouraged by them being damp/drainage basins

F	There are 10 or more vascular plant species per m ² present, including forbs that are characteristic of the habitat type. Note – this criterion is essential for achieving Good condition for non-acid grassland types only.	No		-	-	-
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Creation, Enhancement and Management Detailed Methods (GH-T02)

Provide detailed prescriptions for the creation and management of the habitat.

Action	Relevant Parcels	Timing	Prescriptions
Other Neutral Grassland Creation			
Year 0: Preparation of soil, removal of weeds, sowing		Removal of weeds and soil preparation immediately prior to sowing in autumn or spring	Removal of weeds: Application of herbicide or, if this is not possible, ploughing in spring if dry enough and regular cultivation throughout the summer. Soil preparation: Light harrow to produce a medium tilth then roll to produce a fine, firm and level seedbed. Sowing: Broadcast of commercially sourced seed mix of local provenance, rolled to ensure good contact. Seed mix example provided below, with final product/mix to be confirmed prior to commencement. SuDS - Emorsgate EM8 Meadow Mixture for Wetlands (or equivalent as available/appropriate)
Year 1: Initial management		April to October	Cutting of grassland once every 4-6 weeks as required to maintain sward at 100mm between April and October. Arisings removed following each cut.
Year 2: Allowing to set seed, cut and remove		July and September	Allow flowers to set seed and then two cuts – one in late July and one in September, both to 100mm with arisings removed.
Year 3 onwards: Cut and remove management		July and September	Two cuts each year – one in early-mid July and one in September, both to 100mm with arisings removed.

Grassland (Medium, High, and Very High Distinctiveness) Species Lists (GH-T03)

SuDS

Example species list below.

Common Name	Scientific Name	Abundance / %	Comments
Yarrow	<i>Achillea millefolium</i>	0.5	
Sneezewort	<i>Achillea ptarmica</i>	0.4	
Betony	<i>Betonica officinalis</i>	1	
Common knapweed	<i>Centaurea nigra</i>	3	
Meadowsweet	<i>Filipendula ulmaria</i>	0.4	
Lady’s bedstraw	<i>Galium verum</i>	3	
Meadow crane’s-bill	<i>Geranium pratense</i>	0.5	
Rough hawkbit	<i>Leontodon hispidus</i>	0.5	
Oxeye daisy	<i>Leucanthemum vulgare</i>	1.8	
Greater bird’s-foot-trefoil	<i>Lotus pedunculatus</i>	0.2	
Ribwort plantain	<i>Plantago lanceolata</i>	1	
Cowslip	<i>Primula veris</i>	0.5	
Selfheal	<i>Prunella vulgaris</i>	0.4	
Meadow buttercup	<i>Ranunculus acris</i>	0.8	
Yellow-rattle	<i>Rhinanthus minor</i>	0.8	
Common sorrel	<i>Rumex acetosa</i>	1.4	
Great burnet	<i>Sanguisorba officinalis</i>	0.1	
Pepper saxifrage	<i>Silaum silaus</i>	0.3	
Ragged robin	<i>Silene flos-cuculi</i>	1.7	
Devil's-bit scabious	<i>Succisa pratensis</i>	0.3	
Dandelion	<i>Taraxacum officinale</i> agg.	0.6	
Tufted vetch	<i>Vicia cracca</i>	0.8	
Common bent	<i>Agrostis capillaris</i>	10	

Meadow foxtail	<i>Alopecurus pratensis</i>	3	
Sweet vernal-grass	<i>Anthoxanthum odoratum</i>	3	
Quaking grass	<i>Briza media</i>	3	
Crested dog’s-tail	<i>Cynosurus cristatus</i>	24	
Tufted hair-grass	<i>Deschampsia cespitosa</i>	2	
Red fescue	<i>Festuca rubra</i>	32	
Meadow barley	<i>Hordeum secalinum</i>	3	

Grassland (Low Distinctiveness)

Creation, Enhancement and Management Summary (GL-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 5. Grassland Low

Target Habitat:			Modified grassland (create)			
Condition Assessment Criteria		Targeted	Relevant Parcels	Creation Approach	Enhancement Approach	Management Approach
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs. Note - this criterion is essential for achieving Moderate or Good condition. Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m ² , 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.	No	Open spaces and verges in development parcels	-	-	-
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		-	-	-
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	No		-	-	-
D	Physical damage is evident in less than 5% of total grassland area Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of	No		-	-	-

	access, or any other damaging management activities.					
E	Cover of bare ground between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens.)	No		-	-	-
F	Cover of bracken <i>Pteridium aquilinum</i> less than 20%.	No		-	-	-
G	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA).	No		-	-	--

Grassland (Low Distinctiveness)

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

Provide detailed prescriptions for the creation and management of the habitat.

Action	Relevant Parcels	Timing	Prescriptions
Modified Grassland Creation			
Year 0: Preparation of soil, removal of weeds, sowing	Open spaces	Removal of weeds and soil preparation immediately prior to sowing in autumn or spring	Removal of weeds: Application of herbicide or, if this is not possible, ploughing in spring if dry enough and regular cultivation throughout the summer. Soil preparation: Light harrow to produce a medium tilth then roll to produce a fine, firm and level seedbed. Sowing: Broadcast of commercially sourced seed mix, rolled to ensure good contact. Seed mix example provided below, with final product/mix to be confirmed prior to commencement. Naturescape N14 Flowering Lawn Mixture (or equivalent as available/appropriate)
Year 1: Initial management		April to October	Cutting of grassland once every two months as required to maintain sward at 100mm between April and October. Arisings spread evenly and left in-situ following each cut.
Year 2: Allowing to set seed, cut and remove		April to October	Cut every 2-3 weeks to maintain between 25mm and 35mm as necessary through the growing season. Arisings spread evenly and left in-situ following each cut.
Year 3 onwards: Cut and remove management		April to October	Cut every 2-3 weeks to maintain between 25mm and 35mm as necessary through the growing season. Arisings spread evenly and left in-situ following each cut.

Grassland (Low Distinctiveness) Species Lists (GL-T03)

Example species list below.

Common Name	Scientific Name	Abundance / %	Comments
Yarrow	<i>Achillea millefolium</i>	4	
Kidney vetch	<i>Anthyllis vulneraria</i>	4	
Lady’s bedstraw	<i>Galium verum</i>	12	
Common cat’s-ear	<i>Hypochaeris radicata</i>	3	
Rough hawkbit	<i>Leontodon hispidus</i>	4	
Oxeye daisy	<i>Leucanthemum vulgare</i>	8	
Common bird’s-foot-trefoil	<i>Lotus corniculatus</i>	10	
Ribwort plantain	<i>Plantago lanceolata</i>	8	
Cowslip	<i>Primula veris</i>	7	
Selfheal	<i>Prunella vulgaris</i>	16	
Meadow buttercup	<i>Ranunculus acris</i>	12	
Common sorrel	<i>Rumex acetosa</i>	12	
Common bent	<i>Agrostis capillaris</i>	5	
Crested dog’s-tail	<i>Cynosurus cristatus</i>	15	
Hard fescue	<i>Festuca trachyphylla</i>	20	
Slender creeping red fescue	<i>Festuca rubra ssp. litoralis</i>	20	
Strong creeping red fescue	<i>Festuca rubra ssp. rubra</i>	20	
Smooth meadow-grass	<i>Poa pratensis</i>	20	

What Does Success Look Like? (GL-F01)



Scrub

Creation, Enhancement and Management Summary (SC-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 19. Scrub.

Target Habitat:		Mixed scrub (creation) - Moderate				
Condition Assessment Criteria		Targeted	Relevant Parcels	Creation approach	Enhancement Approach	Management Approach
A	The parcel represents a good example of its habitat type – the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). - At least 80% of scrub is native, - There are at least three native woody species, - No single species comprising more than 75% of the cover (except hazel <i>Corylus avellana</i>, common juniper <i>Juniperus communis</i>, sea buckthorn <i>Hippophae rhamnoides</i> or box <i>Buxus sempervirens</i>, which can be up to 100% cover).	Yes	Open spaces	A mixture of >3 native woody species will be planted, in a ratio where no one single species will comprise more than 75% cover.	-	Management will include monitoring of the species composition and cover to ensure specifications within Criterion A are maintained.
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present.	No		-	-	-
C	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA) and species indicative of suboptimal condition make up less than 5% of ground cover.	Yes		-	-	Monitoring visits will confirm the presence/absence of invasive non-native species, with measures implemented to reduce/remove these if required.
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	No		-	-	-
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Yes		-	-	Management through rotational thinning of mixed scrub parcels will create clearings and glades to allow natural regeneration and localised sheltered edges.

Scrub

Creation, Enhancement and Management Detailed Methods (SC-T02)

Provide detailed prescriptions for the creation and management of the habitat.

Action	Relevant parcels	Timing	Prescriptions
Year 0: Preparation and planting		November to March	Soil preparation – new planting into well-prepared ground following good horticultural practice including cultivation and scarification where appropriate. Planting - in dormant season (November to March) using a range of native species, mixed randomly. Planting density of <1000/ha into pre-prepared beds consisting of topsoil at a depth of no less than 300mm. Planting should be irregular and wide-spaced in places to encourage natural infill and develop small clearings and structural diversity. Planting at edges should be scalloped. Protection - use of appropriate tree protection guards or fencing.
Year 1		Quarterly November to March October to November	Quarterly inspection of tree guards and replacement if necessary. Replacement of failed planting as required, annual inspection and replanting in November to March. Annual formative pruning of young trees to encourage good growth and shape.
Year 2		Anytime November to March October to November	Annual inspection of tree guards and replacement if necessary. Replacement of failed planting as required, annual inspection and replanting in November to March. Annual formative pruning of young trees to encourage good growth and shape.
Year 3 onwards		Anytime November to March September to February	Annual inspection of tree guards and replacement if necessary. Replacement of failed planting as required, annual inspection and replanting in November to March. Coppice 20% of each scrub parcel every three to six years on rotation (depending on growth and conditions). Timing to avoid nesting bird season. Machinery use if ground conditions allow or using hand tools. Remove tree guards as appropriate (Years 10-15).

Scrub Species Lists (SC-T03)

Scrub species lists are TBC.

Common Name	Scientific Name	Abundance / %	Comments

What Does Success Look Like? (SC-F01)



Orchard

Creation, Enhancement and Management Summary (OR-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 17. Orchard

Target Habitat:			Traditional orchard (creation) - moderate			
Condition Assessment Criteria		Targeted	Relevant Parcels	Creation Approach	Enhancement Approach	Management Approach
A	Presence of ancient and or veteran trees. Note – this criterion is essential for achieving Good condition.	No	F1	-	-	-
B	Presence of deadwood in or on trees, or on the ground: at least 20% of mature trees have deadwood associated with them. Some examples of deadwood are: standing, attached and fallen trees or limbs; dead stems; branches and branch stubs greater than 10 cm diameter; and internal cavities. The types and distribution of deadwood provide a range of habitats suitable to support a wide assemblage of saproxylic invertebrates. Note – this criterion is essential for achieving Good condition.	No		-	-	-
C	Less than 5% of fruit trees are smothered by scrub. Small patches of dense scrub and or scattered scrub growing between trees can be beneficial to biodiversity, however these occupy less than 10% of ground cover.	Yes		-	-	Regular monitoring of orchard and clearance of encroaching scrub
D	There is evidence of formative and or restorative pruning to maintain longevity of trees.	No		-	-	-
E	At least 95% of the trees are free from damage caused by humans or animals, for example browsing, bark stripping or rubbing on non-adjusted ties.	Yes		-	-	Enclosing the area with fences to stop animal damage, and fitting tree guards to protect low parts of trees at risk from herbivores such as deer.
F	Grassland is not overgrazed, poaching is not evident around the trees, with no more	Yes		-	-	Enclosing area with fences to prevent trampling of the grassland and poaching.

	than 10% of trees poached under the canopy.					
G	Species richness of the grassland is equivalent to a medium, high, or very high distinctiveness grassland.	No		-	-	-
H	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA) and species indicative of suboptimal condition make up less than 10% of ground cover.	Yes		-	-	Regular monitoring of orchard and clearance of invasive non-native species.

Orchard

Creation, Enhancement and Management Detailed Methods (OR-T02)

Provide detailed prescriptions for the creation and management of the habitat.

Action	Relevant Parcels	Timing	Prescriptions
Grassland Creation (Years 0 – 3)			
Year 0: Preparation, sowing and initial management		Cessation of cultivation and soil preparation immediately prior to sowing in Autumn or Spring	Cessation of arable cultivation Soil preparation: Removal of any existing vegetation then plough the topsoil if there is existing compaction, light harrow to produce a medium tilth then roll. Sowing: Broadcast of commercially sourced seed mix of local provenance, rolled to ensure good contact. An example seed mix is given below, with the final chosen product/mix to be confirmed prior to commencement: Emorsgate EM4 Meadow Mixture for Clay Soils (or similar as available/appropriate)
Year 1: Initial management		April to October	Cuts of grassland every two months as required to maintain sward at 100mm between April and October. Arisings removed following each cut.
Year 2: Cut and remove management		April to May July and September	Continue cuts as above for Year 1 to maintain 100mm sward between April and May. Arisings removed following each cut. Followed by two cuts, one in late July and one in September, both to 100mm with arisings removed.
Year 3 onwards: Cut and remove management		July and September	Two cuts each year – one in early-mid July and one in September, both to 100mm with arisings removed.
Orchard Tree Planting (Years 3 onwards)			
Year 3: Tree planting and establishment		Planting November to December	Prepare trees into 1m diameter circles 10m apart in straight rows at a planting density of 100-150 trees per hectare. Plant bare-rooted fruit tree whips between November to December, avoiding hard frosts and waterlogged conditions. Green compost to be added to planting beds. Trees protected with appropriate tree guards.
Years 3-5		Winter As required	Annual formative and restorative pruning as necessary to ensure longevity. Keep planting beds clear of vegetation and maintain a mulch layer of 75mm for the first three years.
Years 6 onwards		Winter As required	Annual formative and restorative pruning as necessary to ensure longevity. Year 13 onwards – remove protective guards.

Orchard Species Lists (OR-TO3)

Orchard species lists are TBC.

Common Name	Scientific Name	Abundance / %	Comments

What Does Success Look Like? (OR-F01)



Pond

Creation, Enhancement and Management Summary (PO-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 18. Pond

Target Habitat:			Priority pond (creation) – Moderate			
Condition Assessment Criteria		Targeted	Relevant Parcels	Creation Approach	Enhancement Approach	Management Approach
A	The pond is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. Turbidity is acceptable if the pond is grazed by livestock.	No	F11	-	-	-
B	There is semi-natural habitat (moderate distinctiveness or above) completely surrounding the pond, for at least 10 m from the pond edge for its entire perimeter.	No		-	-	-
C	Less than 10% of the water surface is covered with duckweed <i>Lemna</i> spp. or filamentous algae.	Yes		-	-	Pond is regularly monitored and duckweed/filamentous algae is removed when identified
D	The pond is not artificially connected to other waterbodies, such as agricultural ditches or artificial pipework.	Yes		Care is taken in creating the pond away from other waterbodies, including a buffer to account for fluctuations in water level.	-	-
E	Pond water levels can fluctuate naturally throughout the year. No obvious artificial dams, pumps or pipework.	Yes		Pond will be created separate from artificial dams, pumps, or pipework, allowing water levels to fluctuate naturally	-	-
F	There is an absence of listed non-native plant and animal species.	Yes		No listed non-native plant or animal species are currently present	-	Regular monitoring and removal of listed non-native species
G	The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.	Yes		No fish will be artificially added to the pond	-	-
H	In non-woodland ponds: emergent, submerged or floating plants (excluding duckweed) ³ cover at least 50% of the pond area which is less than 3 m deep. (only applicable to non-woodland ponds)	No		-	-	-

I	The pond surface of non-woodland ponds is no more than 50% shaded by adjacent trees and scrub. (only applicable to non-woodland ponds)	Yes		Pond will be created in an open area Trees and scrub should not be planted adjacent to the pond	-	Removal of encroaching trees/scrub
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Pond

Creation, Enhancement and Management Detailed Methods (PO-T02)

Provide detailed prescriptions for the creation and management of the habitat.

Action	Relevant Parcels	Timing	Prescriptions
Year 0: Initial creation		Late summer/autumn	Ponds will be excavated to up to 1.5m deep with shallow bank gradients (<1:10). Marginal shelves of varying depths will be created to maximise habitat opportunities. Excavated material will be spread over adjacent arable land prior to grassland establishment. Marginal shelves will be sparsely planted (20% of each pond’s perimeter) with native aquatic and emergent species (plug planting), allowing space for natural colonisation. The ponds will not be lined.
Years 1-5		Spring/summer	Annual checks to confirm establishment and condition criteria compliance. Remedial actions will be proposed and implemented where required.
Years 5 onwards		Spring/summer	Thereafter monitoring checks every 5 years to check cover of emergent plants and bankside scrub growth, with management undertaken as necessary on a rotational basis to avoid ponds becoming choked or excessively shaded.

Pond Species Lists (PO-T03)

Pond species lists are TBC.

Common Name	Scientific Name	Abundance / %	Comments

What Does Success Look Like? (PO-F01)



Individual Trees

Creation, Enhancement and Management Summary (UT-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 9. Individual Trees

Target Habitat:		Rural and urban trees				
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).	No	Open spaces (rural trees) and development parcels (urban trees)	-	-	-
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	No		-	-	-
C	The tree is mature (or more than 50% within the block are mature).	No		-	-	-
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.	No		-	-	-
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	No		-	-	-
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	No		-	-	-

Individual Trees

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

Provide detailed prescriptions for the creation and management of the habitat.

Action	Relevant parcels	Timing	Prescriptions
Year 0: Preparation and planting	Open spaces	November to March	Soil preparation – new planting into well-prepared ground following good horticultural practice including cultivation and scarification where appropriate. Planting - in dormant season (November to March) using a range of species. Protection - use of appropriate tree protection guards or fencing.
Year 1		Biannually November to March October to November	Biannual inspection of tree guards, stakes and ties, and replacement if necessary. Replacement of failed planting as required, annual inspection and replanting in November to March. Annual formative pruning of young trees to encourage good growth and shape.
Year 2		Anytime November to March October to November	Annual inspection of tree guards, stakes and ties, and replacement if necessary. Replacement of failed planting as required, annual inspection and replanting in November to March. Annual formative pruning of young trees to encourage good growth and shape.
Year 3 onwards		Anytime November to March September to February	Annual inspection of tree guards, stakes and ties, and replacement if necessary. Replacement of failed planting as required, annual inspection and replanting in November to March. Maintain a mulch layer at the base of trees. Remove tree guards as appropriate (Years 10-15).

Individual Trees Species Lists (UT-T03)

Tree species lists are TBC

Common Name	Scientific Name	Abundance	Comments

What Does Success Look Like? (UT-F01)



Hedgerow

Creation, Enhancement and Management Summary (HD-T01)

Provide details of the approach to delivering each of the targeted condition criteria and hedgerow type. Conditions from Statutory Biodiversity Metric habitat condition assessment sheets – Sheet 8. Hedgerow

Target Hedgerow Type:			Native hedgerows (creation) – Moderate			
Condition Assessment Criteria		Targeted?	Relevant Features	Creation Approach	Enhancement Approach	Management Approach
A1	Height >1.5m average along length.	No	???	-	-	-
A2	Width >1.5m average along length.	Yes		Hedgerows should be planted to a width of at least 1.5m	-	Trimming of hedgerows should not be done excessively such that width would be reduced to <1.5m
B3	Gap – hedge base Gap between ground and base of canopy <0.5m for >90% of length.	No		-	-	-
B2	Gap – hedgerow canopy continuity Gaps make up <10% of total length; and no canopy gaps >5m.	Yes		Hedgerows should be planned to not have gaps (e.g. a road shouldn't pass through)	-	Infill planting if gaps are created
C1	Undisturbed ground and perennial vegetation >1m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: - measured from outer edge of hedgerow, and - is present on one side of the hedge (at least)	No		-	-	-
C2	Nutrient-enriched perennial vegetation Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Yes		Use of mulch layer or herbicide spray should reduce the growth of plant species indicative of nutrient enrichment	-	Monitoring should confirm if nutrient-enriched perennial vegetation is present, and if it is, measures should be taken to remove them
D1	Invasive and neophyte species >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on	Yes		Invasive non-native plant species are not currently present and hedgerow creation should not introduce them	-	Monitoring to confirm presence/absence of invasive/neophyte species, and removal.

	Schedule 9 of WCA) and recently introduced species.					
D2	Current damage >90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	No		-	-	-
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.	-		-	-	-
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.	-		-	-	-

Hedgerow

Creation, Enhancement and Management Methods (HD-T02)

Provide detailed prescriptions for the creation and management of the habitat.

Action	Relevant Features	Timing	Prescriptions
Year 0: Planting		November to March inclusive	Planted in double staggered rows (40cm apart) into well-prepared ground, with a minimum of five native tree species used at a frequency of 4-6 plants per metre. The plants should be protected with suitable guards during establishment. A 75mm mulch layer is to be maintained at the hedgerow bases or suitable herbicide spray application to avoid growth of undesirable species.
Year 1: Pruning		Regularly in year 1	In Year 1, prune lateral growth only to encourage bushy growth. Top up mulch layer as required or continue with herbicide spray applications as necessary. Re-firm and replace any loose or failed plants as required.
Year 2 onwards		September to February	Cut hedgerows annually on rotation, no more than 1 year in 3 between 1 st September and 28 th February. Leaving at least two-thirds of hedges untrimmed each year. A minimum height and width of 1.5m is required to meet condition criteria, but ideally greater sizes of 2-3m will be targeted. Infill planting of new specimens where required if gaps begin to form.
Year 5 - 10		As required	Tree guards removed as appropriate.
Year 10 – 15		As required	Lay to promote thickness, if required.

Hedgerow Species Lists (HD-T03)

Hedgerow species lists are TBC.

Common Name	Scientific Name	Abundance / %	Comments

What Does Success Look Like? (HD-F01)



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
	Woodland	TBC	TBC	TBC
	Grassland	TBC	TBC	TBC
	Scrub	TBC	TBC	TBC
	Orchard	TBC	TBC	TBC
	Pond	TBC	TBC	TBC
	Individual trees	TBC	TBC	TBC
	Hedgerows	TBC	TBC	TBC

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)
Monitoring visits will be undertaken in Years 1, 2, 3, 5, 7, 10, 15, 20, 25 and 30. The monitoring visit frequency will ensure that early adaption can be undertaken in management. Each visit will consist of the following measures: • UK Habitat Classification survey to map the extent and nature of habitats, in addition to condition assessments in accordance with Statutory Metric guidance (all habitats). Evaluation of habitat types against set condition criteria targets. • Fixed-point photography (locations set out in Table MS-T01 below). • A Monitoring Report will be written after each visit to include findings and recommendations for any changes in management or remedial actions as necessary.

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
Grassland	Standard condition assessment. In addition, a simple, repeatable grassland monitoring regime is proposed which would include a general assessment of grassland habitats, as well as sampling of fixed quadrat locations across the site. Five quadrats will be sampled within each of the two grassland habitats, obtaining samples across the Site. Each quadrat will record species with a 2m x 2m area, abundance on the DAFOR scale and the average number of species per m ² . The quadrat locations selected in Year 1 will be recorded using OS grid references and approximate locations re-surveyed on each monitoring visit. A botanical species list of each field area will also be collected to check the species assemblage against target species lists.	Undertaken during each monitoring visit. Surveys to be completed between May and August.
Other habitats	Standard condition assessments will be undertaken, recording values for all criteria as required.	
Fixed-point photography	Fixed-point photography locations will be selected and are to be undertaken during each monitoring visit. The exact location, aspect and height of photographs will be recorded on each occasion to allow between-year comparisons of habitat establishment, structure and diversity to be made. A Fixed-point Photography Plan (MS-F01) will be provided for photograph locations and directions.	

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	TBC

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
1	November - December	December	Initial habitat establishment.
3	November - December	December	
5	November - December	December	Confirmation of appropriate establishment and commencement of management procedures (e.g. scrub thinning).
10	November - December	December	Long-term habitat condition progress with evaluation against target criteria.
15	November - December	December	
25	November - December	December	
30	November - December	December	

Adaptive Management

Summary of Adaptive Management Approaches (MS-B02)

During initial site works and habitat establishment, detailed ‘toolbox talks’ will be held with the landowners and land managers/contractors to explain the measures within this Monitoring Plan and encourage an adaptive management approach. Regular communication will be held between the appointed ecologist and Picture Estates Limited/management organisation where positive and negative issues can be explored and rectified as required. Day to day issues can be captured by all involved and issues resolved collectively.

Regular, robust monitoring visits will be undertaken in line with the schedule and methods set out above. These visits will be more frequent in initial years when the potential for issues and external unknown variables will be higher. Monitoring reports will regularly feedback findings to the responsible body.