

Habitat Management and Monitoring Plan

Site Name:	Land East of Chickenhall Lane. Eastleigh
Date:	29/09/2025
Version:	V.01

Author:

FPCR | environment
& design

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
V.01	Draft	AU / JGW / 18.09.25	AU / 22.09.25
V.01	Final		AU / 29.09.25

Document Details

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Authorship Details
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The performance and outcomes of proposed measures may be affected by factors beyond the authors’ control, and no liability is accepted for any failures or deficiencies in habitat creation, enhancement, or establishment caused by such influences. Therefore, the effectiveness and suitability of the recommendations in this plan may change over time. It is the responsibility of those implementing and overseeing this plan to ensure ongoing monitoring and to review and update it as necessary in response to new information or significant changes in site conditions.

Where information has been obtained from third-party sources, including consultants, landowners, stakeholders, and statutory or non-statutory bodies, every effort has been made to verify its accuracy and reliability. No guarantee is given regarding the completeness or accuracy of this information. FPCR Ltd accepts no liability for any loss or damage resulting from reliance on this plan, where it has not been reviewed in consideration of changing circumstances, updated data or guidance.

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	Land East of Chickenhall Lane, Eastleigh
BNG Project Name and Address	Land East of Chickenhall Lane, Eastleigh
Author Organisation	FPCR Environment and Design Ltd
Landowner	OHF 52 Ltd
Land Manager	The care home operator (Hartford Care Ltd)
Responsible person/organisation for creating or enhancing the habitat	Highwood Group
Period covered by this management plan	2027 - 2057
Planning authority	Eastleigh Borough Council
Planning reference (if applicable)	F/24/98678 EoT
BNG register reference (if applicable)	Applicable for off-site only – N/A if using for on-site
Central OS grid reference	SU 46160 19138
Metric revision/title	Reference Biodiversity metric used for this project ('statutory biodiversity metric' from January 2024)
Are any Irreplaceable Habitats present onsite	Yes: ☐ No: ☒

Summary of Management Plan

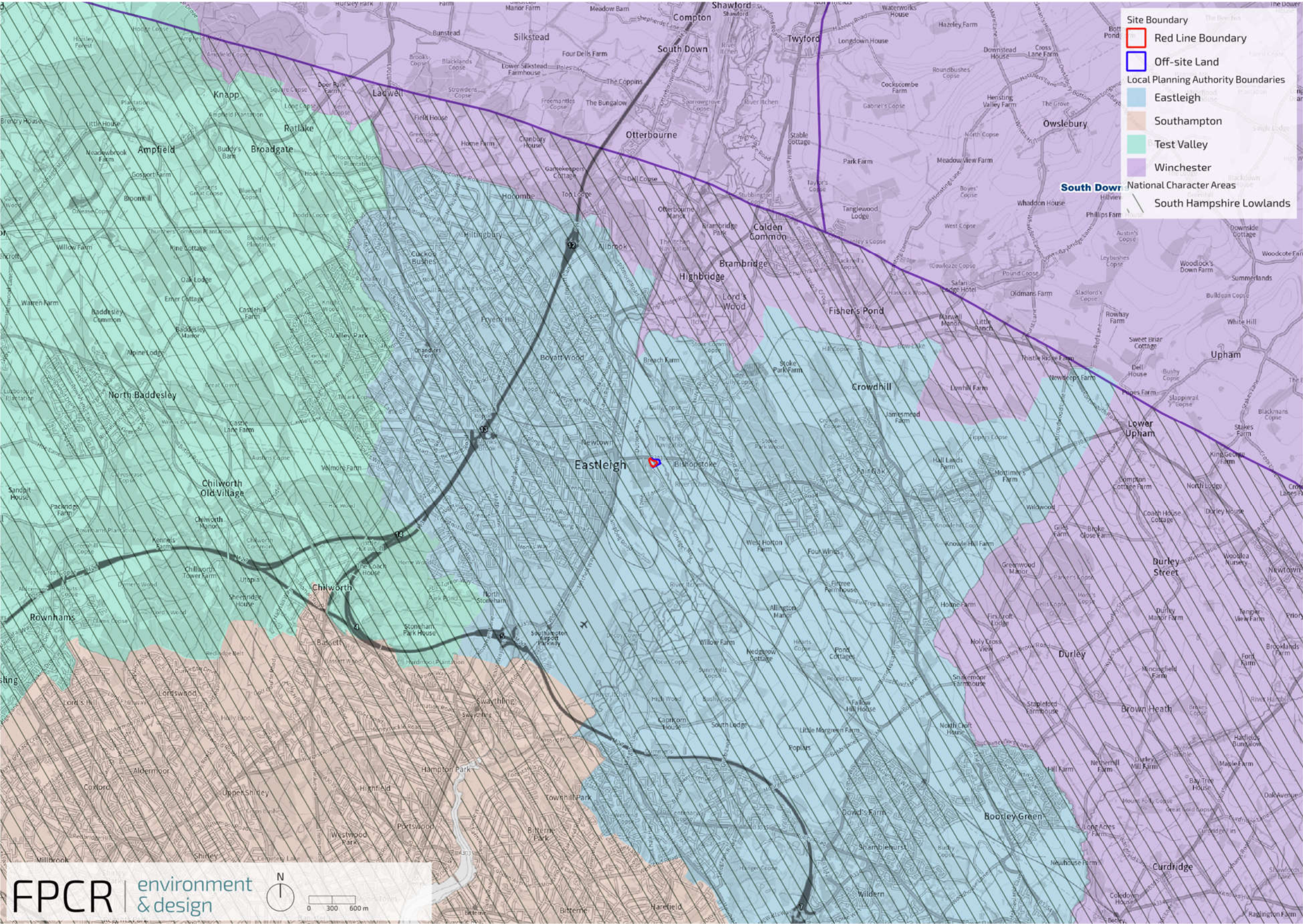
Habitats to be Retained, Created and Enhanced PB-B02
The site spans an area of 0.6ha and forms part of a larger field area to the south. The site is currently largely utilised for material storage by the landowner but a small section is managed as a hay meadow in line with the larger field area to the south. The site sits in a green corridor adjacent to the River Itchen between the large town of Eastleigh and smaller settlement of Bishopstoke. Full planning application for a proposed 70-bed care home (Use Class C2), associated parking, landscaping, access, drainage, and other associated works following demolition of existing structures. This HMMP includes management prescriptions for the following habitats. The key management aims include; • Creation of areas of other neutral grassland • Enhancing introduced shrubs by removing the non-native species and creating mixed and willow scrub. Glades and a riparian zone of grassland suited to wet conditions will be created. • Rain gardens and a bioswale will be created using native species of a variety of structural types. • Creating Modified grassland in areas of amenity in residential areas • Planting 29 new trees comprising predominantly native trees • Planting approx. 37m of ornamental hedgerow and enhancement of existing native hedgerow.
Timescales for Actions PB-B03
The habitats will be managed by the land manager for the lifetime of the development (30 years +) once all BNG creation and enhancement works have been implemented. Commencement of habitat creation and enhancement will begin in 2027 and take 30 years to complete. The Management Plan will be reviewed and, if required, updated every 5 years.
Monitoring Requirements PB-B04
The monitoring strategy will focus on formal monitoring for grassland condition, and routine general monitoring to inform updated management prescriptions in the future. Monitoring will take place in Years 1, 2, 5, and then every 5 years to Year 30. The monitoring outlined here can be adapted in the future, if justified by an ecologist and agreed by the LPA.
Required Consents and Licences PB-B05
No consents are known to be required for the proposed changes of habitats or management activities. There are no known protected or notable species present within the site that would require licensing.

Funding PB-B06
The project is to be funded by Highwood Group
Legal Agreement PB-B07
The monitoring and implementation of the HMMP will be secured via S106 agreement with Eastleigh Borough Council.



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: ☐ No: ☒	
N/A			

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		AD		
Organisation		FPCR Environment & Design Ltd		
Responsibility	Start Date:	2027	End Date:	2057
FPCR are responsible for overseeing the preparation of this HMMP and for providing ecological advice on the delivery of the habitat establishment and management prescriptions provided. FPCR is not responsible for periodic updates to this HMMP resulting from monitoring or adaptive management requirements unless otherwise agreed.				
Statement of Competency				
As one of the leading consultancies in the advancement and delivery of Biodiversity Net Gain (BNG), FPCR Environment & Design has worked with a broad range of landowners, Local Authorities, and government bodies to establish banks of biodiversity units. The experienced team at FPCR has a proven record and competency in delivering HMMPs and is well placed to advise on Biodiversity Net Gain and habitat management for development. The FPCR ecologist who completed the survey has over 15 years of experience in the ecology sector with a focus on botanical and habitat surveying; holding a BSBI Field Identification Skills Certificate (FISC) Level 4.				

Landowner or Land Manager PB-B10				
Name or Initials		TBC		
Organisation		Highwood Group Ltd		
Responsibility	Start Date:	2027	End Date:	2057

The landowner will be responsible for ensuring that this HMMP is adhered to, including arranging and organising the monitoring as set out in this document.				
Statement of Competency				
TBC				
Management Organisation(s) Responsible for Implementing the HMMP PB-B11				
Name or Initials		TBC		
Organisation		Hartford Care Ltd (the care home operator)		
Responsibility	Start Date:	2027	End Date:	2057
TBC				
Statement of Competency				
TBC				
LPA or Responsible Body for Reviewing HMMP PB-B12				
Name or Initials		TBC		
Organisation		Eastleigh Borough Council LPA Ecologist		
Responsibility	Start Date:	2027	End Date:	2057
The LPA will be responsible for ensuring that this HMMP is reviewed, auditing and, or, long-term involvement in the implementation of this HMMP (if applicable)				

Land Use Summary

Overview of Baseline Site Use PB-B13

The site spans an area of 0.6ha and forms part of a larger field area to the south. The site is currently largely utilised for materials storage by the landowner but a small section is managed as a hay meadow in line with the larger field area to the south. The site sits in a green corridor for the River Itchen between the large town of Eastleigh and smaller settlement of Bishopstoke.

The site comprises a mosaic of low-distinctiveness habitats, most of which are in poor condition and are proposed to be lost as part of the development. On-site habitats include areas of bare ground and ruderal/ephemeral vegetation, largely associated with historical material storage and building use. Two existing buildings and associated sealed surfaces are also present and will be removed. Scattered urban trees, including two large poplars recently felled for firewood, are located across the site and along the eastern boundary, where a shelterbelt of introduced shrub (dominated by cherry laurel) is also present. Most of these woody features are to be removed, with replanting proposed.

The majority of the open space is modified grassland, with poor species diversity due to frequent mowing and disturbance. While some of this grassland has regenerated naturally over time, it is generally dominated by annual meadow grass, perennial ryegrass, and other common species. A more diverse area of neutral Arrhenatherum grassland exists in the southern part of the site, which lies partially within a wider field mapped as Coastal and Floodplain Grazing Marsh (CFGM) Priority Habitat. However, field assessments confirmed that only the south-eastern corner of this field supports vegetation representative of CFGM, due to localised wetter conditions. Most of the grassland in this area is dry and has been assessed as poor condition other neutral grassland (ONG).

Adjacent to the site is a chalk stream watercourse, which supports aquatic vegetation such as fool’s watercress and water crowfoot. The banks are generally vegetated and structurally varied, with the top of the river bank intensively mown, with taller vegetation at the waters edge. Several hedgerows are present along site boundaries, with varying levels of species richness and management intensity. H1 and H3 qualify as Important Hedgerows under the Hedgerow Regulations, with H3 supporting a high diversity of woody species.

Overview of Proposed Site Use PB-B14

Full planning application for a proposed 70-bed care home (Use Class C2), associated parking, landscaping, access, drainage, and other associated works following demolition of existing structures.

Habitats which form the green infrastructure include green spaces for amenity, consist of new bioswales and rain gardens, mixed scrub and urban tree planting. Approx 0.11 km of native hedgerow will be retained and enhanced.

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
Statutory / Non-statutory Designated Sites	Will your proposals lead to direct or indirect effects on designated sites?	☒	A surface water outfall into the Barton River, part of the River Itchen SAC/SSSI, is proposed as part of the development. Surface water from car park and roof areas will pass through a series of treatment and attenuation features, before being discharged via a natural swale and headwall located approximately 8m from the river edge. Works to create the swale will occur within the SAC/SSSI boundary, though no direct loss of qualifying habitat is anticipated. The discharge will be continuous over the lifetime of the development but is designed to match current greenfield runoff rates, taking into account high groundwater levels and the site's lack of infiltration potential. The proposed 70-bed care home lies within 10 metres of the SAC, but has been scoped out of any recreational impact due to the non-mobile nature of residents. Wastewater will be treated at Chickenhall WWTW, which discharges into the SAC/SSSI. In the absence of mitigation, this would result in increased nitrate and phosphate inputs. To address this, the development will achieve nutrient neutrality through the purchase of nutrient offset credits. No likely significant effects are predicted on the SAC/SSSI or other statutory designated sites, provided the mitigation measures and treatment design are implemented as planned. Construction works include the creation of a drainage swale within the SAC/SSSI boundary. This feature will enhance bankside habitat compared to the current intensively mown modified grassland. The associated headwall will be located approximately 8m from the river. An Ecological Construction Environmental Management Plan (ECEMP) will be submitted to outline safe working practices to prevent any impact on the SAC. Given the small scale of the works and implementation of mitigation, no likely significant effects on SAC qualifying features are anticipated. The overall development lies within 10m of the SAC boundary but includes robust mitigation. Public access to the river will be restricted, and an 8–15m -wide planted scrub buffer will run the full length of the Barton River within the ownership boundary. This buffer will prevent encroachment and enhance habitat quality. Nutrient neutrality will be achieved through the purchase of phosphate offset credits, ensuring no adverse water quality impacts on the River Itchen SAC.

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?	☒	Detailed within the Chickenhall Lane, Eastleigh. Ecological Impact Assessment (FPCR, June 2025).
Invasive Non-Native Species (INNS)	Are any INNS present onsite that could affect the proposals?	☐	No INNS were recorded on site during 2024. The presence of INNS will continue to be monitored and subsequently managed as part of the HMMP.
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?	☒	Detailed within the Chickenhall Lane, Eastleigh. Ecological Impact Assessment (FPCR, June 2025).
Baseline Habitats Survey	Is this current and important HMMP information located in a separate document? If so, provide details on where it is located.	☒	Detailed within the Chickenhall Lane, Eastleigh. Ecological Impact Assessment (FPCR, June 2025).
Public Access	Has public access, or proposals to allow public access, influenced your management prescriptions? If so, how?	☒	N/A
Climate	Are local climate conditions and, or, climate change likely to impact the target habitat retention, creation or enhancement?	☒	Habitat creation targets are unlikely to be affected by local climate conditions as they comprise common and widespread, generic habitats that will be appropriate for England’s climate
Geology and Topography	Any geological or topographical constraints or opportunities?	☒	The habitats targeted for creation and enhancement include common and widespread habitats that will not be significantly affected by geological conditions.
Agricultural Land Status	Does the site support any land favourable for agricultural management? Could this affect the proposals?	☒	N/A- Not relevant to the site
Soils and Substrates	Do soils and substrates present any constraints or opportunities?	☒	The habitats targeted for creation and enhancement include common and widespread habitats that will not be significantly affected by soil conditions.
Contaminated Land	If there is any contaminated land, will this present any constraints?	☒	N/A- Not relevant to the site
Hydrology and Drainage	Will the site hydrology present any constraints or opportunities?	☒	A detailed Drainage Strategy is in place
Flood Risk Zones	Is the site within a flood risk zone? Will that present any site management risks?	☒	The offsite area is located in a flood zone 2.
Landscape Character and Designations	Does the landscape character of the site present any constraints or opportunities?	☒	Detailed within the Chickenhall Lane, Eastleigh. Ecological Impact Assessment (FPCR, June 2025).
Historic Land Use	Does the historic land use present any constraints or opportunities?	☒	N/A
Historic Environment and Earth Heritage	Are there any historic environment designations? What are the implications for your plan?	☒	N/A
Other – please specify	Any other details - for example underground services or overhead powerlines, which may impact habitat management.	☒	No other constraints are believed to be present

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 proposals are for a proposed 70-bed care home (Use Class C2), associated parking, landscaping, access, drainage, and other associated works following demolition of existing structures.

Creating habitats has projected an uplift in habitat units by using an area of offsite land. This will improve the botanical and structural diversity across the scheme, benefiting biodiversity. Offsite refers to the land between the red application line and the blue line, which is under the clients control.

The following management objectives outline the project's ecological goals. These objectives can be accomplished by following the management prescriptions in this plan. However, the management prescriptions may be modified throughout the project's life to achieve the same objectives in response to changing conditions.

Management Objectives

The aim of this plan is to create varied habitats which will provide amenity value in addition to increase opportunities for wildlife.

Amenity grassland creation:

Areas of modified grassland will be created at the northern and southern site boundaries by using Emorsgate Seeds 'Flowering Lawn Mixture EL1' or similar. This grassland will have a recreational function and will therefore be maintained by regular mowing.

Other neutral grassland creation:

Areas of other neutral grassland will be created within the site boundary and the offsite area, by using a diverse wildflower native seed mix such as or similar to EM3 Emorsgate Special-Purpose Meadow Mixture. The offsite area in particular will be managed for biodiversity. Monitoring and supplementary seeding or remedial measures will be adopted.

Scrub creation:

Native and ornamental shrub will be created on site. Mixed native scrub will be planted in the east of the site in close proximity to the area of created offsite mixed and willow scrub. This will be comprised of a mixture of native species. The offsite scrub will be managed for biodiversity. Management will include measures to maintain a gradual link into the offsite grassland, creating edge habitats. Remedial measures will be employed to reduce the risk of non-native species growing. Ornamental shrub planting will be implemented in the south west of the site.

Individual tree planting:

Several individual trees will be planted across the site, largely concentrated in areas of other neutral grassland. Remedial measures will be used where trees fail or struggle to establish but otherwise will be require minimal management to allow them to mature naturally.

Rain gardens

Rain gardens will be created in the south of the site. These will contain a range of structural planting types and species.

Bioswale

There will be a bioswale running from the site to the water course in the east. This will be planted with species suited to wetland or riparian habitats.

Hedgerows:

Hedgerows of a native and species rich nature will be managed to enhance biodiversity and create habitat for numerous species. Several lengths of ornamental hedgerow will be created within the site boundary.

Additional faunal enhancements:

FPCR recommends that bird nest boxes, bat boxes, reptile hibernacula and hedgehog highways are incorporated into the scheme.

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

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
On-site Habitats							
N/A	Modified grassland		N/A	Poor	Standard time to target condition applied	None	
N/A	Other neutral grassland		N/A	Poor	Standard time to target condition applied	None	
N/A	Mixed scrub		N/A	Poor	Standard time to target condition applied	None	
N/A	Bioswale		N/A	Moderate	Standard time to target condition applied	Criteria B, C, E1 and E2 to be targeted	
N/A	Developed land; sealed surface		N/A	N/A - Other	Standard time to target condition applied	N/A	Due to the nature of the habitat it is not subject to management or monitoring requirements and has been excluded from this report.
N/A	Introduced shrub		N/A	Condition Assessment N/A	Standard time to target condition applied	N/A	Due to the nature of the habitat it is not subject to management or monitoring requirements and has been excluded from this report.
N/A	Rain garden		N/A	Moderate	Standard time to target condition applied	Criteria B, C, E1 and E2 to be targeted	
N/A	Urban tree		N/A	Poor	Standard time to target condition applied	None	
Urban tree	Urban tree	G5	Poor	Poor	N/A	None	Retained
Urban tree	Urban tree	G1	Good	Good	N/A	Criteria A – F to be targeted	Retained
Off-site Habitats							
Ruderal/Ephemeral	Ruderal/Ephemeral		Poor	Poor	N/A	None	Retained

N/A	Mixed scrub		N/A	Good	Standard time to target condition applied	Criteria A – E to be targeted	
N/A	Other neutral grassland		N/A	Good	Standard time to target condition applied	Criteria A – F to be targeted	Created on modified and other neutral grassland baseline, deemed to be lost then recreated.
N/A	Willow scrub		N/A	Moderate	Standard time to target condition applied	Criteria B – D to be targeted	
N/A	Bioswale		N/A	Moderate	Standard time to target condition applied	Criteria B, C, E1 and E2 to be targeted	
Urban tree	Urban tree	G2, G3, G3.2, T1, T2, T3, T4, T5	Good	Good	N/A	Criteria A – F to be targeted	Retained
Urban tree	Urban tree	G3.1, G3.3, G3.4	Moderate	Moderate	N/A	Existing criteria to be targeted	Retained

Habitat and Condition Targets Further Comments

As most baseline habitats will be lost the baseline habitat section has not been included in the table above for the majority of habitats to aid readability.

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

Four of the seven trees on site will be retained, as will the 13 trees in the offsite area. These will be buffered with root protection fencing during construction.

Some areas of ruderal habitat will be retained on site and in the offsite area. As this is a habitat that thrives on disturbance protection will not be required.

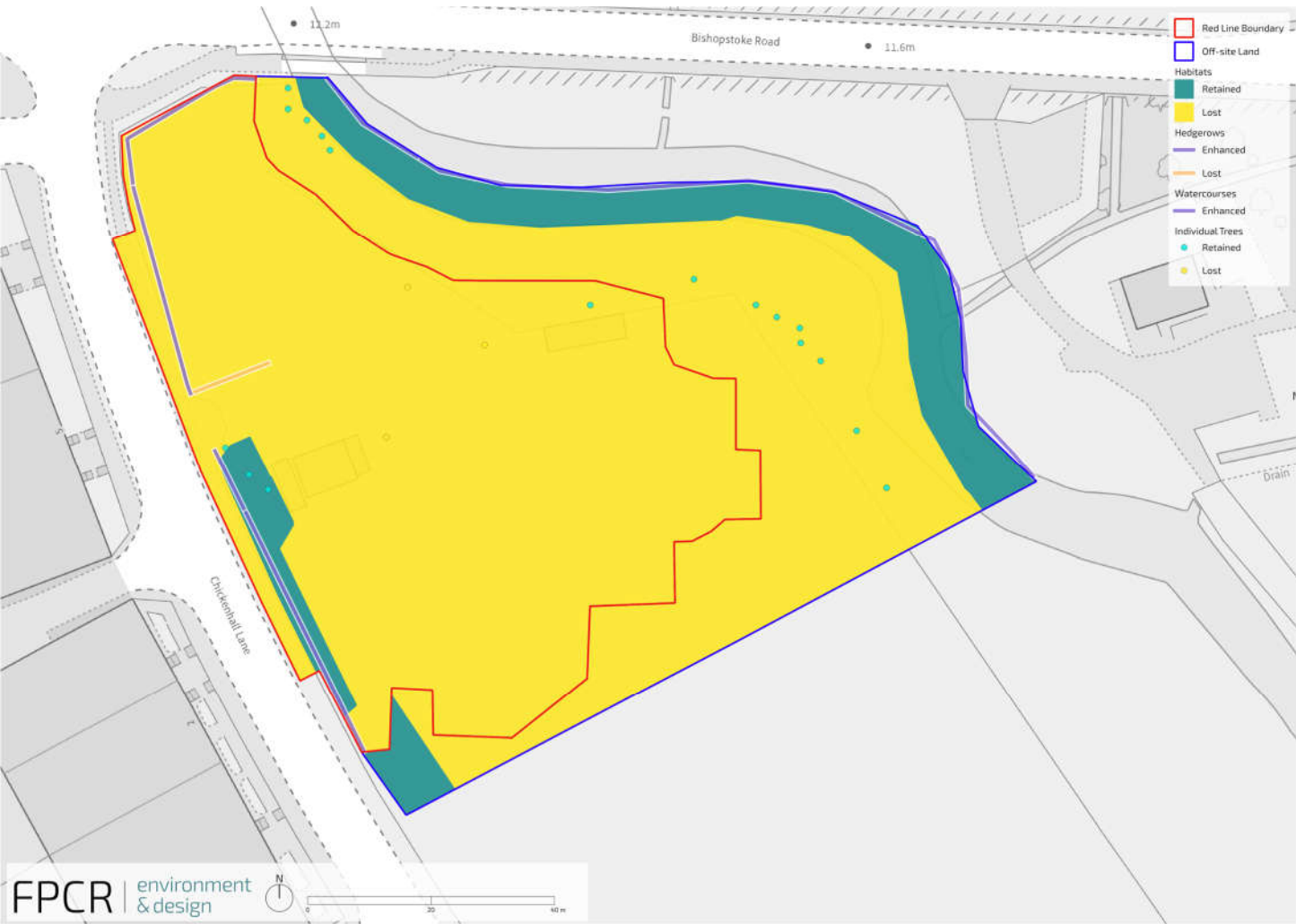
The watercourse will be protected using appropriate fencing to ensure works are confined to the bank top only.

Specification of Protective Measures to be Used PM-04

Retained trees will have fencing to act as a buffer for root protection.

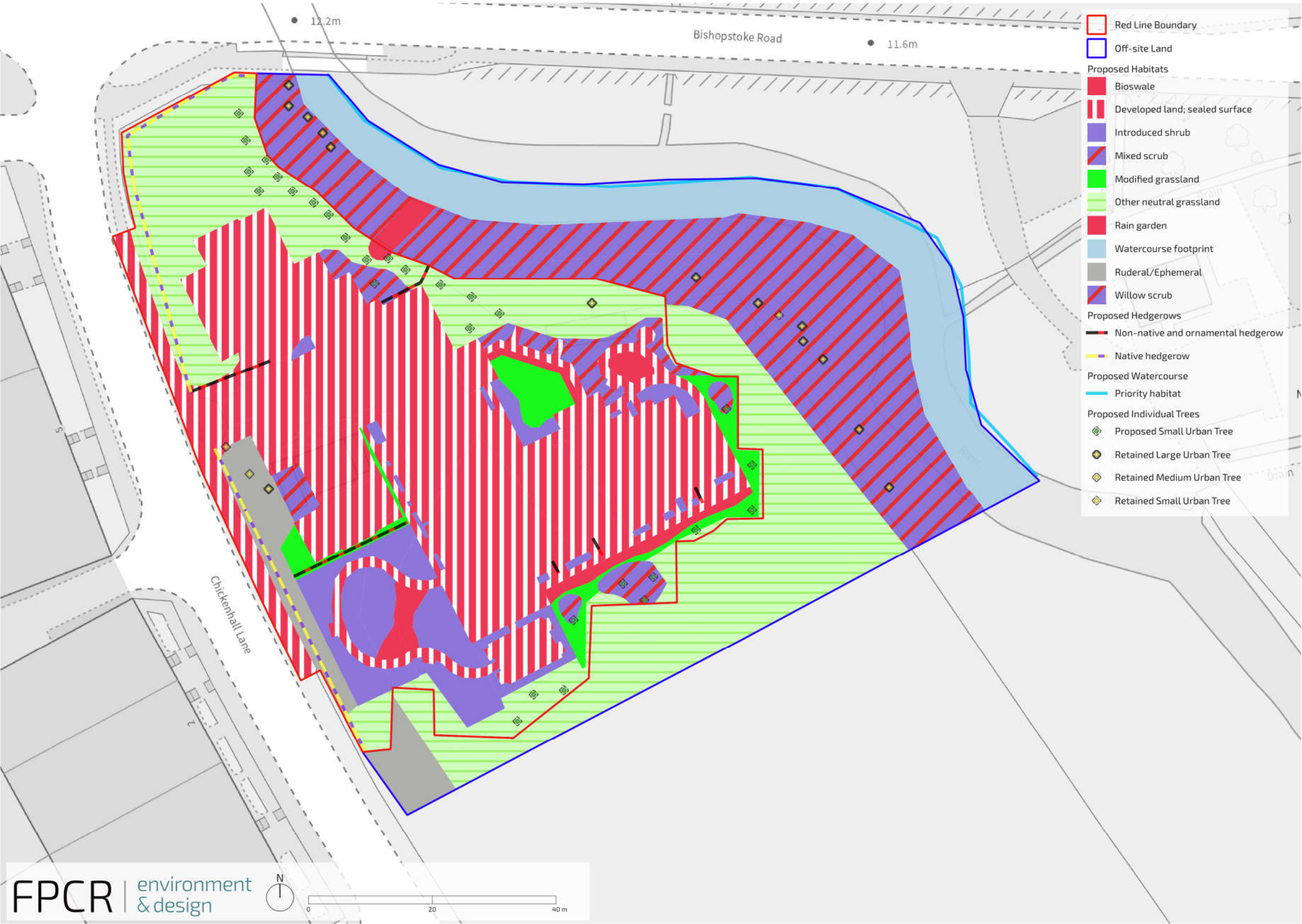
Habitat Retention Plan PM-F01

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

Habitat Creation, Enhancement and Management Plan EM-F01



Modified (Amenity) Grassland (Low Distinctiveness)

Creation, Enhancement and Management Summary (GL-T01)

Target Habitat:		Modified (Amenity) grassland		
Condition Assessment Criteria		Targeted	Relevant Parcels	Creation / 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.	No	All areas	Not targeted
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	All areas	Not targeted however regular, sensitive mowing management will help maintain a varied sward. Access to the site will help create areas of disturbance, promoting a more varied sward with species that are more tolerant of disturbance established in areas frequented by members of the public
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	All areas	Not targeted however regular mowing will prevent scrub from establishing. Regular monitoring will track where scrub encroachment or regrowth has occurred and trigger remedial action where necessary.
D	Physical damage is evident in less than 5% of total grassland area Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	No	N/A	Not targeted however, levels of disturbance will be monitored, and where excessive erosion or poaching is recorded, remedial action, such as controlling access to certain areas, will be taken. This may include fencing / roping off grassland areas. No fertilisers will be used on the Site.
E	Cover of bare ground between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens.)	No	All areas	Not targeted but remedial actions will be implemented where excessive poaching is observed during monitoring that is detrimental to the habitat.
F	Cover of bracken <i>Pteridium aquilinum</i> less than 20%.	No	All areas	Not targeted but regular mowing will prevent bracken from establishing.
G	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA).	No	All areas	No invasive non-native species (as listed on Schedule 9 of WCA) have been recorded on the Site. Regular monitoring will check for invasive non-native species and trigger remedial action if recorded.

Modified (Amenity) Grassland (Low Distinctiveness)

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

Action	Relevant Parcels	Timing	Prescriptions
Ground Preparation	All areas of created amenity grassland areas on-site	Year 0	The topsoil shall be at least 150mm deep, ensuring a free-draining formation level before spreading it. Good ground preparation is essential to success. Remove any weeds using repeated cultivation, remove any large stones or bricks, and then rake and roll (or tread) the soil surface repeatedly in different directions until there is a firm, even surface. The final raking and rolling should produce a seedbed with medium-fine tilth ready for seeding.
Sow Seeds		Year 0 – Autumn / Spring	Seed is best sown in the autumn or spring but can be sown at other times if the soil has sufficient warmth and moisture. Moisture may be supplied artificially by watering, but must be thorough enough to penetrate at least 100mm, and continued after sowing if dry weather follows. Seed should be surface sown onto a freshly prepared seedbed and can be applied by machine or broadcast by hand. To get an even distribution, divide the seed into two or more parts and sow in overlapping sections. After sowing, lightly rake or harrow the surface to settle the seed in. Take care not to bury the seed at depth—firm with a roll or by treading to give good soil/seed contact.
Establishment Management		Year 1	Keep the grass short in the first year and remove all arisings. Mow newly sown flowering lawns regularly (every 7 -10 days during growing season) throughout the first year of establishment. Cut to a 40-60mm height, removing cuttings if dense. This will gradually develop a good sward structure, help balance faster-growing grasses and slower-developing wildflowers, and control annual weeds. For the first year, avoid heavy use, e.g., excessive trampling or vehicle access.
Long-term Management		Year 2 - 30	Once established in years 2+, the grasslands can be mown regularly throughout the growing season (generally March – October) Where possible, allow grass to grow or keep certain areas longer and manage with a Spring cut in March or April and a late Summer / early autumn cut at the end of July or in September to provide habitat/source of nectar for pollinators. The choice between a late summer/early autumn cut should be alternated yearly. Cut pernicious and invasive weeds before they seed in late summer. If needed, use glyphosate spray to spot-treat affected areas only.
Supplementary Seeding (if required)		From Year 5, up to Year 28	Spread supplementary seeds as necessary to respond to poor establishment uptake by broadcasting seeds or introducing plug plants. Sowing must be undertaken in still wind conditions when the soil is saturated but not flooded.

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

Common Name	Scientific Name	Abundance / %	Comments
Wildflowers – 20% of total mix			
Yarrow	<i>Achillea millefolium</i>	1.00%	
Kidney Vetch	<i>Anthyllis vulneraria</i>	1.00%	
Betony	<i>Stachys officinalis</i>	0.40%	
Common Knapweed	<i>Centaurea nigra</i>	1.50%	
Hedge Bedstraw	<i>Galium album</i>	0.40%	
Lady’s Bedstraw	<i>Galium verum</i>	1.50%	
Field Scabious	<i>Kanautia arvensis</i>	0.40%	
Rough Hawkbit	<i>Leontodon hispidus</i>	0.50%	
Oxeye Daisy	<i>Leucanthemum vulgare</i>	1.00%	
Black Medick	<i>Medicago lupulina</i>	1.00%	
Ribwort Plantain	<i>Plantago lanceolata</i>	0.40%	
Hoary Plantain	<i>Plantago media</i>	2.00%	
Cowslip	<i>Primula veris</i>	2.00%	
Selfheal	<i>Prunella vulagris</i>	0.40%	
Meadow buttercup	<i>Ranunculus acris</i>	0.40%	
Bulbous Buttercup	<i>Ranunculus bulbosus</i>	1.60%	
White Clover	<i>Trifolium repens</i>	4.00%	
Grasses – 80% of total mix			
Common Bent	<i>Agrostis capillaris</i>	8.00%	
Crested Dogs-tail	<i>Cynosurus cristatus</i>	28.00%	
Red Fescue	<i>Festuca rubra</i>	24.00%	
Smaller Cat’s-tail	<i>Phleum bertolonii</i>	4.00%	
Smooth Meadow-grass	<i>Pia pratensis</i>	16.00%	

Other Supporting Information

Supporting Information (GL-B02)

It is recommended that [EL1 Flowering Lawn Mixture - Emorsgate Seeds \(wildseed.co.uk\)](#) be used however a suitable alternative may be used. As poor condition is targeted there will be no requirement for a specific seed mix.

EL1 is a mixture that consists of 20% wildflowers and 80% meadow grasses. This mix includes slow-growing grasses along with a selection of wildflowers that respond well to regular, short mowing, making it ideal for amenity areas while offering greater botanical and visual interest. Some sections can be left to grow longer, creating the look of a wildflower meadow, while other areas can be mowed short to resemble amenity grassland.

What Does Success Look Like? (GL-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			
Condition Assessment Criteria		Targeted	Relevant Parcels	Creation 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	Offsite areas only	Land preparation will be carried out prior to seeding to promote nutrient reduction and to allow suitable indicator species to establish. EM3 Emorsgate Special-Purpose Meadow Mixture (or similar approved) will be used to ensure a diverse mix of both grasses and forbs. OR A suitable green hay mix will be selected from a donor site that has been determined to have a suitable species make up.	Ongoing management will be achieved through a combination of hay-cutting and extensive low-density grazing. An annual hay cut will be taken at the earliest opportunity after wildflowers have set seed, typically from July, with flexibility in the cutting date to take into account local conditions. Following the annual hay cut, conservation grazing livestock will be introduced at low density. Livestock will be then present on the fields throughout the year where possible, to be removed only to allow wildflowers to flower, typically April, and set seed before the hay cut, typically in July. Monitoring will influence where additional LUs are required or whether any periods with no livestock are necessary. This management will help maintain a diverse sward characteristic of good quality other neutral grasslands.
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.	Yes	Offsite areas only	Introducing various native grasses and wildflowers will promote a diverse sward height.	Sward height will be managed through cutting, and at least 20% will be left more than 7cm. Leaving areas uncut, such as along margins, will help create structural diversity. Management through an annual hay cut / grazing will encourage the establishment of a naturalised sward.
C	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	Yes	Offsite areas only	N/A	The continuation of grazing on the site will help encourage the establishment of small areas of bare ground to add to the overall structural diversity of the site. Regular monitoring can track the levels of bare ground and additional areas can be artificially introduced where necessary/appropriate.
D	Cover of bracken Pteridium aquilinum less than 20% and cover of scrub (including bramble) less than 5%.	Yes	Offsite areas only	No scrub or bracken was recorded within the fields, and any encroaching scrub since will be cleared before grassland creation.	Management through an annual hay cut will prevent significant scrub/bracken establishment. Adaptive management in response to monitoring reporting recommendations can also target excessive scrub or bracken.

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	Offsite areas only	Preparation of the land to reduce nutrients should reduce the frequency of species indicative of suboptimal conditions. No invasive non-native species were recorded within the site, and any encroaching since will be cleared before grassland creation. No fertiliser will be used during planting of the scrub to prevent eutrophication of the soil. All scrub planting will utilise native species only.	If nutrient levels aren't sufficiently reduced, annual hay cuts can be employed with arisings being removed from site. Nutrient stripping will make species of suboptimal condition less competitive. Additionally fertiliser input onto the site will be prohibited throughout the life of this management plan to prevent the soil condition becoming favourable for these species. Regular monitoring will track the presence of invasive non-native species or those indicative of sub-optimal condition and will trigger remedial action where necessary to remove or reduce their presence respectively.
F	There are 10 or more vascular plant species per m2 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.	Yes	Offsite areas only	Seed mix is to contain enough diversity to ensure that a minimum of 10 species establish per m² and will introduce a range of additional wildflowers and indicator species. OR The donor site for the green hay must support 9-15 species per m² to ensure that the site can support a similar sward.	Management through hay cutting or low-density grazing will encourage seeds to re-enter the soil so species persist. Hay cuts will be carried out after wildflowers have gone to seed. Regular monitoring will track the number of species present and additional seed will be applied where necessary.

Additional Management Prescriptions (GH-B01)

N/A

Grassland (Medium, High, and Very High Distinctiveness)

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

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

Action	Relevant Parcels	Timing	Prescriptions
Ground preparation	All parcels	Year 1 Aug - September (ideally late August)	Ground preparation will be required due to the density of the existing modified grassland sward. Grassland should be cut once every three weeks with the arisings taken away until the habitat creation period in early autumn. This process may require repetition in the first three years to reduce the competitiveness of undesired species. Scarify the grassland using disc and/or chain harrow three times in immediate succession, and in a different direction each time to create at least 50% bare ground.
Sow yellow rattle	All parcels	Year 1 August - September (ideally late August)	After chain harrowing, broadcast yellow rattle seed at a rate of 3kg/ha (overseeding), then roll immediately with a flat roll. Sowing must be undertaken in still wind conditions when the soil is saturated but not flooded. Management will ensure that young plants are not eaten by livestock, and yellow rattle is allowed to set seed each year. Where yellow-rattle establishment has not proven successful, the 'Apply yellow-rattle seed' action will be repeated, and the following prescriptions will be set back.
Sow seed mix	All parcels	Year 2 August - September (ideally late August)	Grassland will be cut (with cuttings removed) or grazed in Autumn to create very short vegetation. Following this cut, chain harrow the existing grassland three times in succession and in a different direction each time to create at least 50% bare ground. Broadcast seed mix. Emorsgate Special General-Purpose Meadow Mixture (EM3) (or similar approved) will be over sown at a rate of 40kg/ha. Sowing must be undertaken in still wind conditions when the soil is saturated but not flooded. After sowing, seed will be bedded in by rolling. OR If the green hay has been collected using a forage harvester, it should be blown directly into a muck spreader, and this can be used to spread the hay on the receptor site. If bales have been collected, the green hay can be spread using a muck spreader, by hand, with a chopper or with a hay turner.
Early aftercare- Mowing	All parcels	Year 2 (May – November) Year 3 (Mid-March – Mid-April)	The sward will be kept short during the first year of establishment. This will be achieved through a cut-and-collect approach. All Arisings will be removed from the site. Mow/top the grassland once per month during the growing season to encourage perennial species propagation and control vigorous growth of weeds/grasses. Mowing/topping before July in the first year following seeding should only be done above the height of germinated yellow rattle plants to allow this annual species to flower and seed. No fertiliser to be applied.
Ongoing mowing regime	All parcels	From Year 3 July - September	Annual hay cuts to be taken in July or August, followed by monthly cuts until September. Arisings to be removed from the site. No mowing to be undertaken between November and July.
Supplementary seeding - if required	All parcels	Years 5, 10, 15, 20, 25 July - September (ideally late August)	Spread supplementary locally sourced native wildflower seeds as necessary in response to poor uptake of establishment by broadcasting seeds, plug plants or green hay of a nearby species rich meadow on similar soils. Sowing must be undertaken in still wind conditions when the soil is saturated but not flooded.

Control invasive / pernicious weeds – if required	Offsite areas only	Years 5+ May - July	Where pernicious and/or invasive weed species establish, targeted cutting prior to setting seed in late summer will be undertaken. Where this management does not prove effective, stands of pernicious and/or invasive weeds will be spot treated using glyphosate spray as appropriate.
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Grassland (Medium, High, and Very High Distinctiveness) Species Lists (GH-T03)

Provide a detailed species list for the habitat to be created.

Common Name	Scientific Name	Abundance / %
Common Bent	<i>Agrostis capillaris</i>	8.00%
Crested Dog’s-tail	<i>Cynosurus cristatus</i>	28.00%
Red Fescue	<i>Festuca rubra</i>	24.00%
Smaller Cat’s-tail	<i>Phleum bertolonii</i>	4.00%
Smooth-stalked Meadow-grass	<i>Poa pratensis</i>	16.00%
Kidney vetch	<i>Anthyllis vulneria</i>	0.4
Common knapweed	<i>Centaurea nigra</i>	1.4
Greater knapweed	<i>Centaurea scabiosa</i>	0.6
Rough chervil	<i>Chaerophyllum temulum</i>	0.2
Crosswort	<i>Cruciata laevipes</i>	0.6
Wild carrot	<i>Daucus carota</i>	1.0
Viper’s-bugloss	<i>Echium vulgare</i>	0.1
Meadowsweet	<i>Filipendula ulmaria</i>	0.1
Hedge bedstraw	<i>Galium album</i>	1.0
Lady’s bedstraw	<i>Galium verum</i>	0.8
Meadow crane’s-bill	<i>Geranium pratense</i>	0.2
Field scabious	<i>Knautia arvensis</i>	0.8
Meadow vetchling	<i>Lathyrus pratensis</i>	0.2
Oxeye daisy	<i>Leucanthemum vulgare</i>	1.0
Musk mallow	<i>Malva moschata</i>	2.4
Black Medick	<i>Medicago lupulina</i>	0.1

Ribwort plantain	<i>Plantago lanceolata</i>	2.2
Hoary plantain	<i>Plantago media</i>	0.8
Salad burnet	<i>Poterium sanguisorba ssp. sanguisorba</i>	2.0
Cowslip	<i>Primula veris</i>	0.4
Yellow rattle	<i>Rhinanthus minor</i>	1.4
Great Burnet	<i>Sanguisorba officinalis</i>	0.2
Red campion	<i>Silene dioica</i>	1.0
Bladder campion	<i>Silene vulgaris</i>	0.2
Tufted vetch	<i>Vicia cracca</i>	0.3
Common vetch	<i>Vicia sativa spp. segetalis</i>	0.2

Other Supporting Information

Supporting Information (GH-B02)

[EM3 Special General Purpose Meadow Mixture - Emorsgate Seeds](#) or suitable agreed alternative to be used.

What Does Success Look Like? (GH-F01)



Individual Trees

Creation, Enhancement and Management Summary (UT-T01)

Target Habitat:		Urban Trees			
Condition Assessment Criteria		Targeted	Relevant Features	Creation Approach	Management Approach
A	The tree is a native species (or more than 70% within the block are native species).	Yes	G1, G2, G3, G3.2, T1, T2, T3, T4, T5, G3.1, G3.3, G3.4, All created trees	Planting will consist primarily of native tree species.	Replacement planting of any failed specimens (if required) will replace specimens like-for-like or favour native species.
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	G1, G2, G3, G3.2, T1, T2, T3, T4, T5, All created trees	Trees will be planted in groups sufficiently distant so they will not compete with neighbouring trees or scrub, allowing them to grow a full and continuous canopy, but close enough that the canopy will be continuous by the end of the management period.	Replacement planting of any failed specimens (if required) will be located to maintain continuous canopy.
C	The tree is mature (or more than 50% within the block are mature).	No	N/A	This criterion will not be targeted for newly planted trees due to the limited time frame available within his management plan (30 years), which will not be sufficient to allow a tree to grow to full maturity.	Retained mature trees to be maintained in a healthy condition over 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	G1, G2, G3, G3.2, T1, T2, T3, T4, T5, G3.1, G3.3, G3.4, All created trees	The bases of trees will be mulched to prevent weed growth. No pruning or management will be done during this management plan other than removing diseased or failed species.	No herbicides shall be used in the planting and establishment process. There will be no pruning or management other than removing diseased or failed species. Therefore, this should not hinder species from meeting this criterion.
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	No	N/A	This criterion will not be targeted as it is unlikely that young, planted trees will be guaranteed to achieve this within the 30-year management period without artificial interventions.	Retained trees to keep existing niches. Where arboricultural work is required that would remove an ecological niche a man made replacement is to be agreed.

F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Yes	G1, G2, G3, G3.2, T1, T2, T3, T4, T5, G3.1, G3.3, G3.4, All created trees	Trees are to be planted in grassland areas and within introduced shrub beds. Grassland will be maintained beneath tree canopies following the abovementioned prescriptions.	No further removal of habitats under the canopy of retained trees in vegetated areas to be undertaken.
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Additional Management Prescriptions (UT-B01)

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Individual Trees

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

Action	Relevant Features	Timing	Prescriptions
Tree planting	All created trees	Year 1	Trees should be sourced from a reputable supplier. Trees will be planted with sufficient space to grow to full maturity. (Where applicable, trees should be played following the seeding of the grasslands). Any evidence of existing soil compaction will be remediated before planting to ensure the soil can support tree establishment and growth. The planting pit dug will be a shallow square, larger than the tree's root ball. The base of the planting pit will be broken up to encourage aeration to the depth of a garden fork before tree planting. Backfilling of soil will utilise existing excavated soils only with no compost or fertiliser application. Existing subsoils and top soils should be kept separate during excavation, with the subsoil backfilled first before topping with topsoil. Lightly firm down the backfill, avoiding compaction. Planting should aim to create scattered trees with a minimum of a 15-20m gap between trees, to reduce competition. Trees are to be mulched using wood chippings or bark to establish a 1m diameter around the tree stem. Planting will be undertaken from 1 November to 31 March when the ground is not frozen or waterlogged. This will accord with BS 8545:2014. • Tree whips should be mixed and planted randomly. Species provided in the table below will create a diverse mix. • Plant with hand tools, such as spades – do not plough or cultivate. • No fertiliser or compost should be used. • Trees should not be planted lower than the surrounding ground level. The aim is to ensure that the base meets the soil level, which will be slightly above ground level, with an aim of 25mm above. • Tree supports are to be installed by planted trees to prevent them from being blown over or disturbed during establishment.
Weed Control	All	Years 2-5	A weed-free mulched 1m diameter circle will be placed around the tree stem to a minimum depth of 75mm. A mulch free buffer of 5cm to be left around tree trunk. When trees have reached independence, the sward can be allowed to grow up to the trunk, although tall weeds, bramble, and ivy will be removed from around the trees. Care will be taken when using strimmers or mowers to avoid damaging trees. Weeds and grass within 1m of the trunks will be removed or cut by hand to prevent damage by machinery.
Aftercare	All created trees	Year 2	Trees will be watered regularly during their first year after planting, when soil becomes dry.
Aftercare	All created trees	Years 2-5	Examine all tree supports and ties and replace or adjust as appropriate. If the tree has yet to be established, replace or adjust ties and spacers as appropriate. Once the tree has established remove all stakes, ties, spacers, tubes, etc., filling holes left by supports with suitable low-nutrient topsoil.
Failure replacement	All	Year 2+	Replace failed specimens on a like-for-like basis, to be replaced in the next planting season (November-February). Top up mulch to a depth of 75mm where necessary.
Aftercare	All created trees	Years 2-10	Where periods of extreme drought occur, trees that have not yet established (not healthy, not in full leaf, suppressed growth) will be watered where their drought tolerance is deemed insufficient.
Removal of tree guards & ties	All created trees	Year 10	Remove remaining tree supports and ties (unless required to support replacement trees).

Individual Trees Species Lists (UT-T03)

Common Name	Scientific Name	Abundance / %	Comments
<i>Acer campestre</i>	Field maple	15%	Native whip
<i>Alnus glutinosa</i>	Alder	10%	Native whip
<i>Betula pendula</i>	Silver birch	15%	Native whip
<i>Carpinus betulus</i>	Hornbeam	10%	Native whip
<i>Populus tremula</i>	Aspen	10%	Native whip
<i>Prunus avium</i>	Wild cherry	10%	Native whip
<i>Quercus robur</i>	English oak	10%	Native whip
<i>Salix caprea</i>	Goat willow	10%	Native whip
<i>Sorbus aria</i>	Whitebeam	10%	Native whip

Other Supporting Information

Supporting Information (UT-B02)

Species suggested are a guide to suitable plants, rather than a definitive list.
Chosen trees should be native species suited to the growing conditions.

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		Enhancement of existing type			
Condition Assessment Criteria		Targeted?	Relevant Features	Enhancement Approach	Management Approach
A1	Height >1.5m average along length.	Yes	All enhanced hedgerows	Hedgerows will be managed to encourage tall, wide and bushy features with only one side of hedgerows cut each year.	Hedgerows will be manged through rotational cutting every two years, with no more than 1/3rd of the total hedgerow resource pruned at any one time and dependent upon species.
A2	Width >1.5m average along length.	Yes	All enhanced hedgerows	Additional planting using a range of native species will be introduced were ‘gapping up’ is required.	Management by side trimming in ‘A’ profile and shaped to promote the development of wide, healthy hedgerow bases.
B3	Gap – hedge base Gap between ground and base of canopy <0.5m for >90% of length.	Yes	All enhanced hedgerows	The 1m margin from the base of the hedgerow will remain ‘undisturbed’ with minimal management.	Management by side trimming in ‘A’ profile and shaped to promote the development of wide, healthy hedgerow bases.
B2	Gap – hedgerow canopy continuity Gaps make up <10% of total length; and no canopy gaps >5m.	Yes	All enhanced hedgerows	N/A	Hedgerows will be monitored, and should any shrubs become diseased, they are to be removed and replaced during the next planting season with a similar species to fill out any gaps.
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)	Yes	All enhanced hedgerows	Hedgerows will be bordered by other neutral grassland.	A minimum of 1m along the hedgerows will be managed as ‘undisturbed’ ground. Management of grassland within these areas adjacent to hedgerows will be in line with the management of meadow grasslands.
C2	Nutrient-enriched perennial vegetation Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Yes	All enhanced hedgerows	No fertiliser will be used onsite to prevent eutrophication of the soil.	Fertiliser will be prohibited within grasslands adjacent to hedgerows to reduce nutrient enrichment. Spot treatment of pernicious weed species will be undertaken as required.
D1	Invasive and neophyte species >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including	Yes	All enhanced hedgerows	Only native species will be planted.	The site will be monitored for the establishment of non-native invasive species, and these will be removed where they have established. Pernicious weed will be spot treated as required to prevent their widespread establishment.

	those listed on 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.	Yes	All enhanced hedgerows	Appropriate management practices will be employed to prevent detrimental damage to hedgerows.	Appropriate management practices will be employed to prevent detrimental damage to hedgerows.
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	N/A	N/A
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.	No	N/A	N/A	N/A

Additional Management Prescriptions (HD-B01)					

Hedgerow

Creation, Enhancement and Management Methods (HD-T02)

Action	Relevant Features	Timing	Prescriptions
Spot treating pernicious weeds	All enhanced hedgerows	Year 1 – 30 Up to twice per year in spring and summer	Control undesirable weeds and competitive growth within a 50cm strip along the hedge edge on each side. Strim or spot spray using an appropriate contact herbicide; one application is made in spring and, depending on the vigour of the weeds, another in mid-late summer. Control should be only as required.
Cutting	All enhanced hedgerows	Annually	Hedgerows will be managed in rotation, cutting only half the of the hedgerow stock within the site annually to ensure that there is a continuous supply of fruit during the winter months for birds and small mammal species. Hedgerows will be managed to a minimum height of 2m and a minimum width of 1.5m. Management by side trimming in ‘A’ profile and shaped to promote the development of wide, healthy hedgerow bases. All existing and planted standard trees will not be trimmed during management. Any established hedges of reasonable structure to support nesting birds, should be managed in the autumn/winter, ideally early February, and should never be done during the bird nesting season (March – August).
Gapping up	All enhanced hedgerows	As required 1st November – 31st March	Where gaps occur within the canopy of the hedge greater than 2m wide, they will be gapped up with native hedgerow species as whips the next available planting season. Species used are detailed in the list provided below. Chosen species should maintain hedgerow species richness.
Regeneration	All enhanced hedgerows	As required 1st November – 31st March	Should the hedges become ‘overmature’, resulting in gaps between the base of the canopy and the ground >0.5m on average across 90% of a length, the hedge will be laid in the local regional style or coppiced the following winter.

Hedgerow Species Lists (HD-T03)

Common Name	Scientific Name	Abundance / %
Oak	<i>Quercus robur</i>	For gapping up
Field Maple	<i>Acer campestre</i>	For gapping up
Hazel	<i>Corylus avellana</i>	For gapping up
Blackthorn	<i>Prunus spinosa</i>	For gapping up
Dog rose	<i>Rosa canina</i> agg.	For gapping up
Elder	<i>Sambucus nigra</i>	For gapping up
Hawthorn	<i>Crataegus monogyna</i>	For gapping up
Holly	<i>Ilex aquifolium</i>	For gapping up

Other Supporting Information

Supporting Information (HD-B02)
Species shown are a non-exhaustive list of hedgerow species that can be used to infill gaps.

What Does Success Look Like? (HD-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 and Willow scrub			
Condition Assessment Criteria		Targeted	Relevant Parcels	Creation 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	All off site scrub	Planting will be undertaken at a reduced density to allow space for natural colonisation alongside planting. Planting will include a minimum of five native woody species in each new scrub block, with no one species comprising more than 75% of the planted specimens. This will promote the growth of a diverse scrub mix, where it does not occur naturally. After 5 years, where necessary, supplementary planting of scrub will be undertaken. This will ensure a minimum of five native woody species in each scrub block, with no one species comprising more than 50% of the planted specimens. This will be achieved through additional planting of species novel to each block and the selective clearing of any over-dominant species.	Areas of scrub will be managed through selective thinning and supplementary planting with a range of native species. The aim of selective thinning will be to ensure no one species comprises more than 50% of the canopy cover while the aim of supplementary planting will be to ensure each block of enhanced scrub will comprise a minimum of five native species.
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present.	Yes	All off site scrub	Existing nearby scrub and hedgerows will be allowed to colonise naturally, creating seedlings and saplings, while existing hedgerow shrubs will be allowed to scrub out. By planting a range of species, including fast-growing and slower-growing specimens, it will help create a varied mix of ages. Any native species present in the existing introduced scrub to be left where possible.	Selective thinning and supplementary planting of existing scrub blocks will introduce a diverse age range by introducing saplings alongside existing canopy and understorey plants
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	All off site scrub	No fertiliser will be used during planting of the scrub to prevent eutrophication of the soil. All scrub planting will utilise native species only.	Any undesirable species such as common nettle will be managed through a programme of control of this pernicious species through spot-spraying will reduce its cover.
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	Yes	All off site scrub	Scrub edges will not be seeded and instead will be managed to allow a natural ecotone to establish. A riparian zone of tall grassland including wetland species will be created along the river.	Scrub will not be seeded and it will be managed to allow a natural ecotone to establish. This will involve selective thinning of scrub edges where appropriate.
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Yes	All off site scrub	Wet grassland glades will be created within the scrub. These will be planted with a wet grassland mix.	Glades will be kept free from scrub encroachment through mowing at least once per year.

Additional Management Prescriptions (SC-B01)

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
Establishment – Riparian Zone	Riparian Zone	Year 1 and 2 Aug - September (ideally late August)	An area approximately 2m from the watercourse bank top will be prepared for plug planting and wet grassland seeding. Grassland should be cut once every three weeks with the arisings taken away until the habitat creation period in early autumn. This process may require repetition in the first three years to reduce the competitiveness of undesired species. Scarify the grassland using disc and/or chain harrow three times in immediate succession, and in a different direction each time to create at least 50% bare ground. Broadcast seed mix. Emorsgate Special General-Purpose Meadow Mixture (EM3) (or similar approved) will be oversown at a rate of 40kg/ha. Sowing must be undertaken in still wind conditions when the soil is saturated but not flooded. After sowing, seed will be bedded in by rolling. OR If the green hay has been collected using a forage harvester, it should be blown directly into a muck spreader, and this can be used to spread the hay on the receptor site. If bales have been collected, the green hay can be spread using a muck spreader, by hand, with a chopper or with a hay turner. If required pot grown plants or plugs can be planted out in April or May when frosts have passed. Plants will be sourced from a reputable supplier or can be grown in advance from seeds or cuttings. Fertiliser or topsoil will not be used during planting. They will be planted in informal drifts at 3–5 plants/m² (approx. 450-600mm centres).
Establishment - Glades	Glades	Year 1 Aug - September (ideally late August)	Ground preparation will be required for the creation of wet grassland glades due to the density of the existing modified grassland sward. Grassland should be cut once every three weeks with the arisings taken away until the habitat creation period in early autumn. This process may require repetition in the first three years to reduce the competitiveness of undesired species. Scarify the grassland using disc and/or chain harrow three times in immediate succession, and in a different direction each time to create at least 50% bare ground. Broadcast seed mix. Emorsgate Special General-Purpose Meadow Mixture (EM3) (or similar approved) will be oversown at a rate of 40kg/ha. Sowing must be undertaken in still wind conditions when the soil is saturated but not flooded. After sowing, seed will be bedded in by rolling. OR If the green hay has been collected using a forage harvester, it should be blown directly into a muck spreader, and this can be used to spread the hay on the receptor site. If bales have been collected, the green hay can be spread using a muck spreader, by hand, with a chopper or with a hay turner.
Establishment – scrub planting	Scrub	Year 1 (1st November – 31st March when the ground is not frozen or waterlogged)	Planting will be introduced surrounding the willow scrub and to create new scrub habitat on the peripheries of the fields as per the proposals plan. Planting density will be low to allow for natural colonisation and supplementary planting will be undertaken to improve diversity. Native scrub species will be planted between November and March in a naturalistic pattern, including gaps for glades/rides/clearings (with the aim of planting to cover 70-80% of the total area of each scrub block once mature). - Planting should be in clumps and not in rows as this will create a wind tunnel. - Planting should be irregular with wide spacing to encourage natural infill or other plants to encourage a diverse vegetation structure.

			- Scallop the edges of the scrub by planting patches of scrub in semi-circles with open ground in between. - Unplanted gaps should be left to create areas of open ground. - Species should be mixed and planted randomly according to the criteria below. Scrub planting will aim at approximately 400-1000 whips per ha (randomly planted at minimum 3m spacing) Scrub planting will be designed to create significant areas of edge habitats and structural diversity, including clearings. Plant with hand tools, such as spades—do not plough or cultivate. The planting pit dug will be a square, larger than the root ball of the whip. Soil backfilling will utilise existing excavated soils only, with no compost or fertiliser application. It will be important to ensure that whips are not planted lower than the surrounding ground level. Planting will aim to ensure that the level that the whip base meets the soil is slightly above ground level, aiming for 25mm above. Spiral guards will be installed around establishing whips to prevent them from becoming browsed. Apply herbicide to control weed growth/docks prior to planting (if required). A qualified contractor will select an appropriate herbicide. Any chemicals will be used in accordance with the product label. <u>Mixed Scrub</u> Group planting will be employed with 1-3 species of similar growth rates planted together. Hawthorn and blackthorn will be planted in small single-species clumps in the centre of the scrub blocks, away from the planned locations for rides and clearing. Blocks of each of these two species will be sufficiently spaced apart to prevent either from dominating the canopy.
Thinning	Scrub	Year 1 November - March	Selective thinning of existing stands will aim to create scattered open glades, aiming for a 70-80% total coverage of scrub across this habitat and to allow light to reach the ground and promote regeneration of seedlings and saplings. Selective clearing of scrub edge (roughly 1/3 to 1/5) down to ground will also help to reduce dominance of species such as blackthorn and hawthorn and promote regeneration of young shrubs/herb edge
Early aftercare- Mowing	Glades	Year 2 (May – November) Year 3 (Mid-March – Mid-April)	The sward will be kept short during the first year of establishment. This will be achieved through a cut-and-collect approach. All Arisings will be removed from the site. Mow/top the grassland once per month during the growing season to encourage perennial species propagation and control vigorous growth of weeds/grasses. Mowing/topping before July should only be done above the height of germinated yellow rattle plants to allow this annual species to flower and seed. No fertiliser to be applied.
Ongoing mowing regime	Glades	From Year 3 July - September	Annual hay cuts to be taken in July or August, followed by monthly cuts until September. Arisings to be removed from the site. No mowing to be undertaken between November and July.
Early aftercare- Mowing	Riparian Zone	Year 2 and 3 (May - November)	If plug or pot grown plants are used in addition to seeding then mowing regime will avoid them, either by setting the cut height above the plug plants, or by avoiding the locations of pot grown plants.
Ongoing mowing regime	Riparian Zone	From Year 3 November	A rotational management regime will be used that allows continuity of habitat at all stages of vegetation growth. This will be achieved through staggering by cutting a third of the marginal vegetation on a 3 year cycle. Management to be undertaken in November prior to winter flooding.
Supplementary planting	Scrub	Year 5+ November - March	Where through natural regeneration a diverse range of scrub is not establishing, supplementary planting should be undertaken as necessary to increase species diversity and/or abundance.

Supplementary seeding - if required	Glades and Riparian Zone	Years 5, 10, 15, 20, 25 July - September (ideally late August)	Spread supplementary locally sourced native wildflower seeds as necessary in response to poor uptake of establishment by broadcasting seeds, plug plants or green hay of a nearby species rich meadow on similar soils. Sowing must be undertaken in still wind conditions when the soil is saturated but not flooded.
Weed control	All	Year 5 – 15 April – July	Spot treatment of species indicative of sub-optimal condition will be undertaken on existing scrub blocks as required.
Weed control	All	Year 5+ April – September	Hand Pulling/cutting and spot treating invasive, aggressive and non-native species.
Thinning	Scrub	Year 5 November - March	Thin scrub by hand, to achieve an approximate coverage of 70-80 scrub and 20-30% glades. Blocks of 1000-2500m2 should be removed to create glades and rides within the scrub to achieve the desired age structures and mosaic. During coppicing and pruning, retain at least 25% of brash and deadwood in-situ.
Aftercare	Scrub	Between Years 6-10 Anytime	Tree guides and ties are to be removed (unless required to support replacements).
Thinning	Scrub	Year 10+ November - March	A programme of selective thinning will begin in year 10, with rotational coppicing and pruning undertaken every 3 years with 1/5th of the total scrub resource in each block coppiced on each cycle. This will be undertaken in select areas through scrub blocks to enhance ground flora and continue the presence of glades at an approximate coverage of 70-80 scrub and 20-30% glades. Hawthorn and blackthorn will be pruned as required as these species do not respond well to coppicing, while the remaining species to be planted will be managed through coppicing. During coppicing and pruning, retain at least 25% of brash and deadwood in-situ.
Scrub edge management	Scrub	Years 1 – 30 August - September	Annual cut of scrub margins and herbaceous vegetation within scalloped edges and glades - in line with management of adjacent grasslands.
Trimming - as required	Scrub	Years 3 - 27 November - March	Management of dense stands of hawthorn and blackthorn. Prune to maintain edges with a graded margin down to grassland.

Scrub Species Lists (SC-T03)

Provide a detailed species list for the habitat to be created.

Common Name	Scientific Name	Abundance / %	Comments
Mixed Scrub			
Hawthorn	<i>Crataegus monogyna</i>	10%	Native Whip
Blackthorn	<i>Prunus spinosa</i>	10%	Native Whip
Buckthorn	<i>Rhamnus cathartica</i>	5%	Native Whip
Crab Apple	<i>Malus sylvestris</i>	10%	Native Whip
Dog Rose	<i>Rosa canina</i>	10%	Native Whip
Dogwood	<i>Cornus sanguinea</i>	10%	Native Whip
Elder	<i>Sambucus nigra</i>	10%	Native Whip
Hazel	<i>Corylus avellana</i>	10%	Native Whip
Guelder rose	<i>Viburnum opulus</i>	10%	Native Whip
Holly	<i>Ilex aquifolium</i>	10%	Native Whip
Clematis	<i>Clematis vitalba</i>	10%	Native Whip
Honeysuckle	<i>Lonicera periclymenum</i>	10%	Native Whip
Spindle	<i>Euonymus europaeus</i>	5%	Native Whip
Willow scrub			
Goat Willow	<i>Salix caprea</i>	30%	Native Whip
Crack Willow	<i>Salix fragilis</i>	30%	Native Whip
Grey Willow	<i>Salix cinerea</i>	30%	Native Whip
Downy birch	<i>Betula pubescens</i>	5%	Native Whip
Alder	<i>Alnus glutinosa</i>	5%	Native Whip
Riparian Zone			
Marsh marigold	<i>Caltha palustris</i>	15%	Plug / Pot Grown Plant
Meadowsweet	<i>Filipendula ulmaria</i>	10%	Plug / Pot Grown Plant
Yellow flag iris	<i>Iris pseudacorus</i>	15%	Plug / Pot Grown Plant

Water mint	<i>Mentha aquatica</i>	15%	Plug / Pot Grown Plant
Water forget-me-not	<i>Myosotis scorpioides</i>	15%	Plug / Pot Grown Plant
Lesser spearwort	<i>Ranunculus flammula</i>	15%	Plug / Pot Grown Plant
Brooklime	<i>Veronica beccabunga</i>	15%	Plug / Pot Grown Plant
Riparian Zone and Glades			
Yarrow	<i>Achillea Millefolium</i>	0.70%	Seed mix
Agrimony	<i>Agrimonia eupatoria</i>	0.60%	Seed mix
Wild Angelica	<i>Angelica sylvestris</i>	0.10%	Seed mix
Betony	<i>Betonica officinalis</i>	0.20%	Seed mix
Common Knapweed	<i>Centaurea nigra</i>	3.20%	Seed mix
Meadowsweet	<i>Filipendula ulmaria</i>	1.40%	Seed mix
Hedge Bedstraw	<i>Galium album</i>	0.40%	Seed mix
Lady's Bedstraw	<i>Galium verum</i>	2.00%	Seed mix
Meadow Vetchling	<i>Lathyrus pratensis</i>	0.80%	Seed mix
Rough Hawkbit	<i>Leontodon hispidus</i>	0.60%	Seed mix
Oxeye Daisy (Moon Daisy)	<i>Leucanthemum vulgare</i>	1.20%	Seed mix
Bird's-foot Trefoil	<i>Lotus corniculatus</i>	0.60%	Seed mix
Greater Bird's-foot Trefoil	<i>Lotus pedunculatus</i>	0.10%	Seed mix
Black Medick	<i>Medicago lupulina</i>	1.00%	Seed mix
Ribwort Plantain	<i>Plantago lanceolata</i>	2.00%	Seed mix
Cowslip	<i>Primula veris</i>	0.40%	Seed mix
Selfheal	<i>Prunella vulgaris</i>	0.80%	Seed mix
Meadow Buttercup	<i>Ranunculus acris</i>	1.20%	Seed mix
Yellow Rattle	<i>Rhinanthus minor</i>	0.80%	Seed mix
Common Sorrel	<i>Rumex acetosa</i>	0.60%	Seed mix
Great Burnet	<i>Sanguisorba officinalis</i>	0.30%	Seed mix

Ragged Robin	<i>Silene flos-cuculi</i>	0.50%	Seed mix
Dandelion	<i>Taraxacum officinale</i>	0.20%	Seed mix
Tufted Vetch	<i>Vicia cracca</i>	0.30%	Seed mix
Common Bent (w)	<i>Agrostis capillaris</i>	4.00%	Seed mix
Sweet Vernal-grass (w)	<i>Anthoxanthum odoratum</i>	4.00%	Seed mix
Grey Sedge (w)	<i>Carex divulsa subsp. divulsa</i>	0.80%	Seed mix
Crested Dog's-tail	<i>Cynosurus cristatus</i>	33.60%	Seed mix
Tufted Hair-grass (w)	<i>Deschampsia cespitosa</i>	1.60%	Seed mix
Red Fescue	<i>Festuca rubra</i>	20.00%	Seed mix
Meadow Barley (w)	<i>Hordeum secalinum</i>	3.20%	Seed mix
Smaller Cat's-tail (w)	<i>Phleum bertolonii</i>	5.60%	Seed mix
Rough-stalked Meadow-grass	<i>Poa trivialis</i>	5.60%	Seed mix
Tall Fescue	<i>Schedonorus arundinaceus</i>	1.60%	Seed mix

Other Supporting Information

Supporting Information (SC-B02)

Species suggested are a guide to suitable plants, rather than a definitive list.

At least 6 woody species from the scrub list and both climbers will be used for the mixed scrub. The willow scrub will contain at least 60% willow planting, alongside species suited for riparian scrub.

The riparian zone should use EM8 Meadow mixture for wetlands (or similar approved) and may use the plug / pot grown plant mix to supplement this.

What Does Success Look Like? (SC-F01)



Creation, Enhancement and Management Summary (UR-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 22. Urban

Target Habitat:		Bioswale and rain gardens			
Condition Assessment Criteria		Targeted	Relevant Parcels	Creation Approach	Management Approach
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	No	Bioswale and rain gardens	Not specifically targeted however a variety of species consisting of different vegetation types will be planted in the rain garden.	The habitat will be monitored to ensure that one structural habitat component does not become too dominant
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	Yes	Bioswale and rain gardens	A range of plant species will be planted with a range of flowering species that will provide nectar throughout the year.	Any losses will be replaced on a like for like basis ensuring that wildlife niches are maintained.
C	Invasive non-native plant species (listed on Schedule 9 of WCA) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of total vegetated area. Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Yes	Bioswale and rain gardens	Only native species will be planted.	Habitats will be monitored for INNS as well as detrimental species. Where applicable these will be removed.
E1	Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife. (only applicable to Bioswale and SUDS habitat types)	Yes	Bioswale	Only native species will be planted.	Habitats will be monitored for significant coverage of non-native species. Where applicable these will be removed.
E2	The vegetation is comprised of plant species suited to wetland or riparian situations. (only applicable to Bioswale and SUDS habitat types)	Yes	Bioswale	Species suited to wetland or riparian situations will be planted.	Habitats will be monitored for significant coverage of non wetland/riparian species. Where applicable these will be removed.

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

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

Action	Relevant Parcels	Timing	Prescriptions
Ground preparation	Rain garden	Year 0	Ground preparation will entail weeding by hand any perennial weeds and digging a depression in the soil of around 6 inches with gradual slopes down from the edges. Placing a landscaping fabric at the bottom of the excavation will prevent weeds and allow water to percolate through. A layer of gravel or crushed stones for drainage and then a mix of sand and native soil will be used on top to amend the soil and improve drainage. The loose soil removed can then be used to create a low berm to direct the water into the garden.
Sowing	Bioswale	Year 0 August - September (ideally late August)	Emorsgate EM8 Meadow mixture for wetlands (or similar approved) will be sown at a rate of 40kg/ha. Sowing must be undertaken in still wind conditions when the soil is saturated but not flooded. After sowing, seed will be bedded in by rolling.
Shrub and tree planting	Rain garden	Year 0-1 November - March	Trees should be sourced from a reputable supplier. Trees will be planted with sufficient space to grow to full maturity. (Where applicable, trees should be played following the seeding of the grasslands). Any evidence of existing soil compaction will be remediated before planting to ensure the soil can support tree establishment and growth. The planting pit dug will be a shallow square, larger than the tree's root ball. The base of the planting pit will be broken up to encourage aeration to the depth of a garden fork before tree planting. Backfilling of soil will utilise existing excavated soils only with no compost or fertiliser application. Existing subsoils and top soils should be kept separate during excavation, with the subsoil backfilled first before topping with topsoil. Lightly firm down the backfill, avoiding compaction. Planting should aim to create scattered trees with a minimum of a 15-20m gap between trees, to reduce competition. Trees are to be mulched using wood chippings or bark to establish a 1m diameter around the tree stem. Planting will be undertaken from 1 November to 31 March when the ground is not frozen or waterlogged. This will accord with BS 8545:2014. • Tree whips should be mixed and planted randomly. Species provided in the table below will create a diverse mix. • Plant with hand tools, such as spades – do not plough or cultivate. • No fertiliser or compost should be used. • Trees should not be planted lower than the surrounding ground level. The aim is to ensure that the base meets the soil level, which will be slightly above ground level, with an aim of 25mm above. Tree supports are to be installed by planted trees to prevent them from being blown over or disturbed during establishment.
Planting	Bioswale and rain gardens	Year 1 March - May	A range of plug or pot grown plants will be planted into the swale margins and within rain gardens following their creation. Pot grown plants or plugs will be planted out in April or May when frosts have passed. Plants will be sourced from a reputable supplier or can be grown in advance from seeds or cuttings. Fertiliser or topsoil will not be used during planting.
Establishment care	Rain garden	Years 1 - 5	Once all plants are in the ground, water them well and add a layer of mulch. If there are prolonged periods of drought, continue watering throughout the 5 year establishment period. The rain garden is to be kept mulched and weed and grass free.

Weed control	Bioswale	Years 2-5	To control any flush of annual weeds, within the first year the grass may require up to four cuts. As such, the created grassland should be monitored within the first year and if grass growth is considered to be vigorous a cut should be taken. This should be undertaken after late summer / early autumn. The sward length should ideally be kept at 100mm or below. Any residual perennial weeds such as docks should be dug out.
Weed control	Rain garden	Years 2-5	A weed-free mulched 1m diameter circle will be placed around tree stems to a minimum depth of 75mm. A mulch free buffer of 5cm to be left around tree trunk. When trees have reached independence, the sward can be allowed to grow up to the trunk, although tall weeds, bramble, and ivy will be removed from around the trees. Care will be taken when using strimmers or mowers to avoid damaging trees. Weeds and grass within 1m of the trunks will be removed or cut by hand to prevent damage by machinery. Any residual perennial weeds such as docks should be dug out.
Supplementary seeding - if required	Bioswale	Years 5, 10, 15, 20, 25 July - September (ideally late August)	If any areas have failed to establish, they should be re-seeded, during the appropriate season.
Supplementary planting - if required	Bioswale and rain gardens	Years 5, 10, 15, 20, 25 March - May	If any areas have failed to establish, they should be re-planted with like for like replacements, during the appropriate season. Plant specimens to be found dead or diseased will be replaced in the following planting season on a one-for-one basis.
Aftercare - Trees	Rain garden	Years 2 - 10	Trees will be watered regularly during their first year after planting, when soil becomes dry. Where periods of extreme drought occur, trees that have not yet established (not healthy, not in full leaf, suppressed growth) will be watered where their drought tolerance is deemed insufficient. Examine all tree supports and ties and replace or adjust as appropriate. If the tree has yet to be established, replace or adjust ties and spacers as appropriate. Once the tree has established remove all stakes, ties, spacers, tubes, etc., filling holes left by supports with suitable low-nutrient topsoil. Replace failed specimens on a like-for-like basis, to be replaced in the next planting season (November-February). Top up mulch to a depth of 75mm where necessary. Remove remaining tree supports and ties (unless required to support replacement trees).
Mowing	Bioswale	Years 3-30	On-going management will involve a single cut to a height of c.70mm after flowering in July (with late June- early August acceptable), removing arisings after they have dried, followed by monthly cuts in August, September and October. Once every four years cut the grass in late August - September to allow late flowering species to set seed. A second Autumn / early spring cut may be necessary to remove any excess grass growth. Cut material should be removed from the created grassland area and either taken off site or taken to a suitable composting area on-site. This should be located close to the grassland area to avoid the need of moving cut material long distances. Between 20-80% of swale will be left unmown every year on rotation, in order to provide sward height variation. Following establishment, swales will be brought into a rotational management regime that allows continuity of habitat at all stages of vegetation growth. This will be achieved through staggering by cutting a third of the marginal vegetation or 1 side only of a ditch on a 3 year cycle. Management to be undertaken in November prior to winter flooding.

Urban Species Lists (UR-T03)

Provide a detailed species list for the habitat to be created

Common Name	Scientific Name	Abundance / %	Comments
Bioswale			
Yarrow	<i>Achillea Millefolium</i>	0.70%	Seed mix
Agrimony	<i>Agrimonia eupatoria</i>	0.60%	Seed mix
Wild Angelica	<i>Angelica sylvestris</i>	0.10%	Seed mix
Betony	<i>Betonica officinalis</i>	0.20%	Seed mix
Common Knapweed	<i>Centaurea nigra</i>	3.20%	Seed mix
Meadowsweet	<i>Filipendula ulmaria</i>	1.40%	Seed mix
Hedge Bedstraw	<i>Galium album</i>	0.40%	Seed mix
Lady’s Bedstraw	<i>Galium verum</i>	2.00%	Seed mix
Meadow Vetchling	<i>Lathyrus pratensis</i>	0.80%	Seed mix
Rough Hawkbit	<i>Leontodon hispidus</i>	0.60%	Seed mix
Oxeye Daisy (Moon Daisy)	<i>Leucanthemum vulgare</i>	1.20%	Seed mix
Bird’s-foot Trefoil	<i>Lotus corniculatus</i>	0.60%	Seed mix
Greater Bird’s-foot Trefoil	<i>Lotus pedunculatus</i>	0.10%	Seed mix
Black Medick	<i>Medicago lupulina</i>	1.00%	Seed mix
Ribwort Plantain	<i>Plantago lanceolata</i>	2.00%	Seed mix
Cowslip	<i>Primula veris</i>	0.40%	Seed mix
Selfheal	<i>Prunella vulgaris</i>	0.80%	Seed mix
Meadow Buttercup	<i>Ranunculus acris</i>	1.20%	Seed mix
Yellow Rattle	<i>Rhinanthus minor</i>	0.80%	Seed mix
Common Sorrel	<i>Rumex acetosa</i>	0.60%	Seed mix

Great Burnet	<i>Sanguisorba officinalis</i>	0.30%	Seed mix
Ragged Robin	<i>Silene flos-cuculi</i>	0.50%	Seed mix
Dandelion	<i>Taraxacum officinale</i>	0.20%	Seed mix
Tufted Vetch	<i>Vicia cracca</i>	0.30%	Seed mix
Common Bent (w)	<i>Agrostis capillaris</i>	4.00%	Seed mix
Sweet Vernal-grass (w)	<i>Anthoxanthum odoratum</i>	4.00%	Seed mix
Grey Sedge (w)	<i>Carex divulsa subsp. divulsa</i>	0.80%	Seed mix
Crested Dog’s-tail	<i>Cynosurus cristatus</i>	33.60%	Seed mix
Tufted Hair-grass (w)	<i>Deschampsia cespitosa</i>	1.60%	Seed mix
Red Fescue	<i>Festuca rubra</i>	20.00%	Seed mix
Meadow Barley (w)	<i>Hordeum secalinum</i>	3.20%	Seed mix
Smaller Cat’s-tail (w)	<i>Phleum bertolonii</i>	5.60%	Seed mix
Rough-stalked Meadow-grass	<i>Poa trivialis</i>	5.60%	Seed mix
Tall Fescue	<i>Schedonorus arundinaceus</i>	1.60%	Seed mix
Rain garden			
Silver birch	<i>Betula pendula</i>	2 individuals	Tree
Alder	<i>Alnus glutinosa</i>	2 individuals	Tree
Guelder rose	<i>Viburnum opulus</i>	10%	Shrub
Dogwood	<i>Conus sanguinea</i>	10%	Shrub
Stinking hellebore	<i>Helleborus foetidus</i>	10%	Herbaceous perennial
Bugle	<i>Ajuga reptans</i>	10%	Rhizomatous perennial
Columbine	<i>Aquilegia vulgaris</i>	10%	Herbaceous perennial

Hemp agrimony	<i>Eupatorium cannabinum</i>	5%	Herbaceous perennial
Bellflower	<i>Campanula glomerata</i>	10%	Herbaceous perennial
Sneezeweed	<i>Achillea ptarmica</i>	5%	Herbaceous perennial
Yellow flag	<i>Iris pseudacorus</i>	5%	Rhizomatous perennial
Soft rush	<i>Juncus effusus</i>	5%	Evergreen perennial
Pendulous sedge	<i>Carex pendula</i>	5%	Rhizomatous perennial
Greater pond-sedge	<i>Carex riparia</i>	5%	Rhizomatous perennial
Royal fern	<i>Osmunda regalis</i>	5%	Deciduous fern
Male fern	<i>Dryopteris felix-mas</i>	5%	Deciduous or evergreen fern
Broad buckler fern	<i>Dryopteris dilatata</i>	5%	Deciduous or evergreen fern

Other Supporting Information

Supporting Information (UR-B02)

Emorsgate EM8 Meadow mixture for wetlands or similar approved seed mix will be sown in the bioswales, along with a range of native plug plants suited to wet soil conditions.

An indicative list rain garden planting list is provided above. The final mix will consist of native species of a variety of structural types including at least two of the following: trees, shrubs, tall herbaceous, tall linear leaved, short perennial, short linear leaved.

What Does Success Look Like? (UR-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
Years 1-3	Other Neutral Grassland; Modified Grassland; Bioswale; Scrub Glades and Riparian Zone	Failed areas of seeding	Greater than 10% bare ground during years 2-5.	Apply additional seed in areas of failed establishment. Appropriate seed mix to be used for the compartment where reseedling is required.
Project life term	Other Neutral Grassland; Modified Grassland	Poor sward height diversity	Where <20% of the sward is <7cm and <20% of the sward is >7cm.	Implement appropriate mowing/strimming regime
Project life term	Other Neutral Grassland; Modified Grassland; Bioswale; Scrub Glades and Riparian Zone	Scrub or bracken encroachment	Scrub and or bracken cover greater than 5% or 20% respectively	Initiate programme of scrub and/or bracken removal as required. This can either be through mechanical removal or spot spraying with herbicide.
Project life term	Other Neutral Grassland; Modified Grassland; Mixed Scrub; Willow Scrub; Scrub Glades and Riparian Zone	Establishment of species indicative of sub-optimal condition	Where species indicative of sub-optimal comprise >5% of sward	Initiate a programme of spot-spraying species indicative of sub-optimal condition using glyphosate herbicide.
Project life term	Other Neutral Grassland; Hedgerows; Mixed scrub; Willow Scrub; Rain Garden; Bioswale; Scrub Glades and Riparian Zone	Establishment of non-native invasive species	Monitoring identifies the presence of any invasive non-native species within the sward	Initiate a programme of eradication of invasive non-native species. Specialist advice should be sought to ensure the appropriate eradication measures for the species identified.
Project life term	Other Neutral Grassland	Poor species diversity and representation of wildflowers, sedges and indicator species.	Wildflowers, sedges and indicator species are not very clearly and easily visible in the sward.	Initiate yellow-rattle and red bartsia seeding to reduce the competitiveness of grasses.
Project life term	Individual trees; Rain Garden	Failed specimens	Failed specimens observed during the 30-year period.	Replacement planting with like for like species of failed specimens
Project life term	Individual trees, Hedgerows, Mixed Scrub; Willow Scrub; Rain Garden	Newly planted trees or whips failing to establish from drought etc	10% of newly planted whips found to be dead during years 1-10. Any trees to be found dead.	Undertake a second round of planting, replacing failed specimens on a like-for-like basis.
Project life term	Individual trees, Hedgerows	Plant heath / disease ie <i>Phytophthora ramorum</i> , oak processionary moth	More than 10% mortality rate of trees; Any of the following high-risk disease or pests are present: Identify a tree pest or disease: overview - GOV.UK (www.gov.uk)	Phytophthora – Fell / remove as first intervention Oak processionary moth – report nests via TreeAlert and seek specialist help with treatment such a spraying to treat nests. Do not attempt to

				remove or treat nests without contacting a specialist company. Where significant mortality is observed (>10% of whips) or any trees seek ecological advice to initiate additional planting if required.
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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 site will be monitored at varying degrees from establishment through to its long-term management. Initially, in years 2 and 5, an ecologist will monitor the site to review how the establishment of the proposed habitat creation and enhancement is progressing. The key observations during this period will be to determine whether habitats are successfully establishing and improving and whether replacement planting or reseedling may be required.

During years 5-10 after implementation the site management will begin to change to longer-term management. Monitoring will be undertaken at the beginning and end of this 5-10-year period, with a visit to review grassland condition in year 10.

During years 11-30 monitoring will be undertaken every five years beginning at year 15. The key elements of this monitoring will be to review whether the long-term management practices maintain the site in the targeted condition scores for the proposals. During this period, adaptive management measures will be reviewed to determine whether there are any opportunities to alter management to encourage additional habitat enhancements.

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	During the establishment phase of the grassland (years 1 to 5) monitoring will focus on determining the DAFOR abundances of plants present throughout the sward and whether a sufficient number of species within the seed mixes used have established. It will also be important to monitor the percentage coverage of palatable grasses. Quadrat sampling will be undertaken to identify the habitat type that is establishing and then number of species per m² and collect a botanical species list across grassland to check against target species list. As well as the above, the following should be monitored: - Estimate the percentage of bare ground, bramble and bracken cover. - Presence of non-native invasive species - Sward height diversity - Level of trampling damage If areas are exhibiting condition factors associated with the nearby higher distinctiveness habitats, the management plan will be updated to reflect this.	In years 2 and 5, and then every 5 years from year 10. Grassland monitoring will be undertaken between May-August.
Individual trees	During years 2 and 5 of the management plan period, individual specimen trees will be monitored for their health. - Examine stakes and ties replace, adjust or remove as appropriate. - Fill in any holes in soil with suitable top-soil as appropriate. - Replace failed specimens on like for like basis, top up mulch where necessary. (Years 2-5) - Water any trees that are not yet established through periods of drought (years 2-5) Years 10-30 remove stake guards unless required to support replaced specimens.	In years 2 and5, then every 5 years starting at year 10. Tree monitoring will be undertaken between May-September.
Hedgerows	During years 2 and 5 of the management plan period monitoring of enhanced hedgerows will be taken and monitored for: The number of species prevailing per 20m	In years 2 and5, then every 5 years starting at year 10. Hedgerow monitoring will be undertaken between May-September.

	• Size of and % of gaps within the canopy • The height and width of the hedgerow • Presence of invasive non-native species The character of the edge habitats	
Mixed and willow scrub	During years 2 and 5 of the management plan period, individual specimen scrub plants will be monitored for their health. The abundance of species indicative of sub-optimal condition and the presence of non-native invasive species will also be reviewed. Throughout the remainder of management period, scrub will be monitored for: • The number of native scrub canopy species in each block • The percentage cover of various age ranges of scrub throughout scrub blocks • Percentage cover of species indicative of sub-optimal condition • Presence of non-native invasive species • The character of edge habitats, glades, and riparian zones.	Years 2, 5, 10, 15, 25, 30 Surveys to be completed between May and August.
Bioswale and rain gardens	During years 2 and 5 of the management plan period, individual specimen scrub plants will be monitored for their health. The abundance of species indicative of sub-optimal condition and the presence of non-native invasive species will also be reviewed. Throughout the remainder of management period, rain gardens and bioswales will be monitored for: • Weed growth • Failed specimens • Plant species diversity • Structural variation • Presence of non-native invasive species	Years 2, 5, 10, 15, 25, 30 Surveys to be completed between May and August.

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	Eastleigh Borough 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
Yr 1	Once planting completed	N/A	Summary report to be submitted to the council confirming habitat creation works
Yr 2	Once planting completed	N/A	Summary report to be submitted to the council confirming habitat creation works
Yr 5	October	October	Full monitoring report and any management plan changes required to be submitted in updated HMMP if appropriate
Yr 10	October	October	Full monitoring report and any management plan changes required to be submitted in updated HMMP if appropriate
Yr 15	October	October	Full monitoring report and any management plan changes

			required to be submitted in updated HMMP if appropriate
Yr 20	October	October	Full monitoring report and any management plan changes required to be submitted in updated HMMP if appropriate
Yr 25	October	October	Full monitoring report and any management plan changes required to be submitted in updated HMMP if appropriate
Yr 30	October	October	Summary report of site status to be submitted.

Adaptive Management

Summary of Adaptive Management Approaches (MS-B02)

The appropriately experienced ecologist will receive and review the monitoring survey reports. When a recommendation is made to the landowner to ensure objectives compliance, it will be ensured through communication between the ecologist and the landowner that this is addressed within that year through adaptive management.

The management plans for the Site will be reviewed in year 5 following creation and then every 5 years, which will capture any necessary changes in the management of the Site required to achieve the target habitat prescriptions and conditions.