



Landscape & Ecological Management Plan

Perham Down PV Installation

Aspire Defence Services Ltd.

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Basis of Report

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1.0 Introduction

1.1 Purpose of the Report

SLR Consulting Ltd (SLR) has been commissioned by Aspire Defence Services Ltd to prepare a Landscape and Ecological Management Plan (LEMP) in support of the proposed Photovoltaic (PV) solar array and associated infrastructure at land off Lambdown Terrace, Perham Down, Wiltshire (SP11 9JL), centred at Ordnance Survey National Grid Reference SU 24931 49066.

The LEMP provides the broad principles for the management of the Site for the initial 5-year period post completion and has been completed with input from the relevant professionals to reflect key landscape and ecological objectives and strategies for the Site.

This LEMP applies solely to the Wider Biodiversity Offset Area (WBOA), identified as the blue line in Figure 1 below. The red line application boundary is addressed separately through the Habitat Management and Monitoring Plan (HMMP)¹, which governs the delivery of on-site Biodiversity Net Gain (BNG) within the red line area.

Since the grant of planning permission, the administrative approach to delivering off-site BNG units has been updated. The measurable biodiversity uplift associated with the development will now be delivered entirely through a registered and legally compliant off-site BNG provider, rather than the previously referenced unregistered locations, including the WBOA and Choulston Farm.

Notwithstanding this change, all habitat creation and enhancement measures proposed within the WBOA remain unchanged and will be implemented in accordance with the approved scheme. The WBOA is therefore retained as an area for wildlife and landscape planting and is managed through this LEMP during the operational phase of the development

All references within this report to the Landscape Plan relates to Landscape proposal plan Drg no 34-PXZ600-43-GA-L1-100 A (03/02/2025) and all reference to the construction compound relates to the Construction Compound Drawing no. 34-PXZ600-43-GA-W6-001 (17/04/2025), these documents were approved as part of the planning application.

¹ SLR Consulting Ltd. July 2026. Perham Down PV Installation. HMMP.





Figure 1 – WBOA area ‘blue line’

The LEMP has been prepared in response to Condition 10 of planning application reference PL/2025/01089 which states:

“Prior to the start of construction, a Landscape and Ecology Management Plan (LEMP) shall be submitted to and approved in writing by the Local Planning Authority. The Plan shall be prepared in accordance with the approved Ecological Mitigation and Enhancement Plan and seek to deliver all mitigation and enhancement measures in accordance with the Ecological Impact Assessment. The plan will include but not necessarily be limited to, the following:

- a. A construction compound calcareous grassland restoration strategy.*
- b. Long term objectives and targets, management responsibilities and maintenance schedules for each ecological feature within the development.*
- c. Mechanism for monitoring success of the management prescriptions, incorporating review and necessary adaptive management in order to attain targets.*

REASON: To ensure the long-term management of landscape and ecological features retained and created by the development, for the benefit of visual amenity and biodiversity for the lifetime of the scheme.”

1.2 Scope of Report

The aim of the LEMP is the long term management of the habitats within the WBOA.

The LEMP is divided into the following sections:

- Introduction;
- Site Context;



- Proposed Development – Aims and Objectives;
- Implementation of the Landscape Scheme;
- Vegetation Establishment;
- Landscape/Ecology Features;
- Management Responsibilities;
- Management Operations; and
- Monitoring Requirements.

2.0 Site Context

2.1 Introduction

The WBOA is approximately 1.55 ha in area and contains horse paddocks with associated stable buildings, bounded by stock proof and electrical fences.”

The WBOA contains several horse paddocks with associated stable buildings, bounded by stock proof and electrical fences. Installation of a PV solar array and associated infrastructure will be within the red line whilst the WBOA will be used for mitigation and enhancements for wildlife and landscaping.

2.2 Landscape Context

The Site is located within the administrative boundary of Wiltshire Council. The Site is to the south-west of Perham Down Barracks. A strip of plantation woodland is present along the south-west boundary. Lambdown Terrace is adjacent to the eastern boundary, and residential properties with associated gardens are present along the northern boundary. The surrounding area comprises a mixture of horse paddocks, woodland, pasture and arable land.

2.3 Ecological Context

An Ecological Impact Assessment (EclA) was prepared by SLR Consulting Limited in November 2024² to inform the planning application for the proposed development.

The report identified the following ecological features within the Site (red line and WBOA):

- *The majority of the Site is other calcareous grassland, aside from an area of other neutral grassland present in the north area of the Site.*
- *Native species rich hedgerow is present along the east boundary of the Site.*
- *Mixed scrub and bramble scrub is present in the north boundary of the Site.*
- *The Site has a notable population of reptiles, the habitat on Site should be managed appropriately.*

The report identified the following biodiversity enhancements included within the scheme:

- A detailed BNG assessment has been undertaken for the red line. The WBOA is being utilised for landscaping and ecological enhancements.

² SLR Consulting Ltd. (November 2024). Perham Down PV Installation. Ecological Impact Assessment.



- The WBOA supports bats, reptiles and breeding birds, and potentially badgers and hedgehogs. The installation of the PV within the red line will reduce the overall foraging area available to these species.
- All grassland within the WBOA will be managed to allow a longer and more species-rich sward to develop, providing improved foraging opportunities for bats, and suitable habitat for reptiles. Enhancements within the WBOA will also improve foraging conditions for badgers and hedgehogs, and the loss of habitat within the fenced area is therefore considered to be adequately mitigated.

An Ecological Management Enhancement Plan³ (EMEP) sets out what enhances are recommended for the WBOA in the form of:

- 10x reptile refugia.
- 3x bat boxes.

It also referenced buffer areas to be applied to existing vegetation, with a 10 metre (m) buffer from the woodland edge and 5m buffer from the hedgerow (except for a small area which will be within 4m).

A landscaping plan was submitted with the application, outlining the landscaping strategy.

3.0 Proposed Development – Aims and Objectives

3.1 Strategies

The prescriptions reflect the Ministry of Defence's operational constraints.

Taking into consideration the findings of the EcIA conducted by SLR in November 2024³, and ecological surveys carried out, the main aims and objectives for the WBOA proposed landscape and ecology scheme are as follows:

Landscape and Ecology Strategy

The proposed landscape scheme will:

- Maintain the other calcareous grassland and other neutral grassland in accordance with the EcIA², EMEP³ and HMMP¹.
- Create a functional landscape with connectivity to surrounding landscape features;
- Overseeding of construction compound plan for location with calcareous grass mix containing yellow rattle *Rhinanthus minor*;
- Existing woodland (outside of the WBOA) and scrub areas within the WBOA to be maintained in the interest of nature conservation in accordance with the EcIA², HMMP¹ and EMEP³. Planting of mixed scrub into bramble scrub and enhancing baseline mixed scrub. Existing areas of woodland are to be supplemented with further planting of 16 trees (including within new hedgerows);
- 0.34km of species rich native hedgerow planting is proposed within the WBOA;
- Ensure positive management to ensure the long-term landscape and ecological benefits of the WBOA are realised;
- Introduction of bat boxes and reptile hibernacula around the blueline; and

³ SLR Consulting Ltd. (July 2025). Perham Down PV Installation. Ecology Mitigation and Enhancement Plan



3.2 Proposed planting and habitat /landscape features

To ensure the successful establishment and long-term success of the proposed design, more specific management objectives have been noted for each of the vegetation/habitat types:

- **Over seeding of calcareous grass mix with yellow rattle construction compound area:** in order to reinstate grassland after removal of construction compound.
- **Longer sward of grassland and changed management regime:** The grassland within the WBOA will have the horses removed and will be cut once a year providing a more species rich sward and longer grassland.
- **Planting of native trees:** to be managed to ensure healthy growth in the interests of visual amenity and biodiversity.
- **Planting of native shrub species:** to be managed to establish a diverse, species rich hedgerow to support species.
- **treePlanting of mixed scrub:** to be managed to establish a diverse, species rich scrub to support species.
- **Installation of bat boxes and reptile hibernacula:** to be managed to provide immediate opportunities to faunal species within the areas of native planting.

4.0 Implementation of the Landscape Scheme

4.1 Introduction

The following section deals with how existing vegetation will be protected and sets out the Construction Compound Restoration Calcareous Grassland Strategy.

4.2 General Operations

4.2.1 Protection of Existing Vegetation

A construction compound will be installed within the Site (red line and WBOA) during construction details of which can be seen in the approved plan.

Temporary ground protection trackway will be laid while construction is in progress; to protect the grassland below but this area will be subject to shading and compression during the construction period. Reptile habitat manipulation will need to be undertaken prior to installation.

4.2.1.1 Construction Compound Calcareous Grassland Restoration Strategy

Once the temporary ground protection trackway is lifted the ground will be sown with Habitat Aid's 'Salisbury Plain Meadow Seed Mix' or equivalent. Refer to the CEMP-B⁴ for further details on the impact and mitigation of construction works on ecological features within the WBOA.

⁴ SLR Consulting Ltd. (April 2026). Perham Down PV Installation. Construction Environmental Management Plan for Biodiversity.



4.2.2 Protection of Nesting Birds

All habitat management works will take into consideration the potential impacts on nesting birds. Habitat works that could impact nesting birds will be carried outside of the nesting bird season (which runs from March to late August inclusive). If this is not possible, a suitably qualified ecologist must undertake a pre-vegetation clearance/management check to confirm no nesting activity, carried out no more than 48 hours prior to clearance commencing.

4.2.3 Ground Preparation and Vegetation Removal

Prior to commencement of any softworks, all areas would be suitably cleared and prepared for planting/seeding. Proposed planting/seeding areas shall be cleared of all unwanted rubbish, and any debris (any debris or rubbish will be searched for reptiles first) and unwanted vegetation/weeds removed prior to planting. The location of any existing services within the WBOA will also be established before clearance works and planting begins.

4.2.4 Soil Resource

All areas of tree and shrub planting will be assessed for compaction prior to planting and if necessary or practical, de-compaction will be carried out to a depth of 300mm, with soils loosened, aerated and broken up when ground conditions are reasonably dry.

4.2.5 Watering

The Contractor will assess the need for watering prior to the commencement of works. If considered necessary, the full depth of soil will be watered during planting operations and all areas thoroughly watered immediately after planting operations, without damaging or displacing plants. If the planting is programmed to take place during a prolonged dry and warm period, the contractor will seek advice from the Client regarding the possibility of delaying planting until suitable weather conditions prevail. It is anticipated that new planting may require watering, in exceptional drier periods in the first year, but it is not intended that this continues beyond the first year.

5.0 Vegetation Establishment

5.1 Introduction

The following section of this LEMP deals with how the various proposed vegetation/habitat types will be established on WBOA. The Landscape Proposal Plan sets out the installation specifications, and this LEMP governs the post-establishment management during the operational phase. Refer to Landscape Plan.

5.2 Proposed Tree and Shrub Establishment

All plants will be planted in the first available planting season (November – March) where possible, in accordance with the program.

Plants will be sourced as locally as possible, and all effort will be made to source stock of native genetic origin, conforming to the Natural Plant Specification⁵.

Tree Establishment

Trees will be sourced as locally as possible, with all efforts made to source stock of native genetic origin refer to the Landscape plan.

⁵ [National Plant Specification \(NPS\)](#)



Hedgerow Establishment

Hedgerow plants will be sourced as locally as possible, with all efforts made to source stock of native genetic origin, refer to the Landscape plan.

5.2.1 Proposed Trees

Tree species will include those identified in **Table 5-1:** **Proposed Tree** below, with further details on specification in with the Landscape plan. The proposed trees have been selected to enhance the aesthetic and visual qualities of the area, provide seasonal interest, and provide biodiversity benefits including for nesting and foraging habitats.

Table 5-1: Proposed Tree Planting

Latin Name	Common Name
<i>Acer campestre</i>	Field maple
<i>Crataegus monogyna</i>	Common hawthorn
<i>Carpinus betulus</i>	European hornbeam
<i>Malus sylvestris</i>	European crab-apple
<i>Fagus sylvatica</i>	Beech
<i>Prunus avium</i>	Bird cherry
<i>Ilex aquifolium</i>	Holly

5.2.2 Proposed Hedge Planting

The Landscape Proposal Plan set out the installation specifications, and this LEMP governs the post-establishment management during the operational phase.

Plants will be sourced as locally as possible, and all effort will be made to source stock of native genetic origin with at least three woody species. All plant handling and planting operations will comply with relevant clauses of CPSE 'Handling and Establishing of Landscape Plants' (obtainable from the Horticultural Trades Association)⁶.

Hedge planting species list can be found in Table 5-2.

Table 5-2: Proposed Hedge Planting

Latin Name	Common Name
<i>Crataegus monogyna</i>	Common hawthorn
<i>Cornus sanguinea</i>	Dogwood
<i>Corylus avellana</i>	Common hazel
<i>Euonymus europaeus</i>	Common spindle
<i>Ligustrum vulgare</i>	Privet
<i>Prunus spinosa</i>	Blackthorn
<i>Sambucus nigra</i>	Elder
<i>Lonicera periclymenum</i>	Common honeysuckle

⁶ HTA | Home



5.2.3 Proposed Grassland Management

Grassland within the WBOA area (both the other calcareous and other neutral grassland will be managed with a relaxed cutting regime to create enhanced habitat for reptiles. The horse grazing of the Site will stop.

Species indicative of suboptimal condition should be removed.

During the first year remove any weeds (or species indicative of suboptimal condition as referred to under the above section) before they run to seed, either by topping, mowing or by hand for smaller areas.

In September/ October and again in March, during the first year. Cut the area to 15cm, with arisings removed. Monitor diversity and apply selective thinning of dominant species to encourage diversity. Leave up to a third of vegetation over winter e.g. near linear features and bases of individual trees. Re-seed where necessary.

After year 1, cut annually in September, removing all arisings. Leave up to a third of vegetation uncut over winter. Mow paths in vegetation regularly for sward variation.

Monitor diversity and apply selective thinning of dominant species to encourage diversity.

Seeding lowland calcareous grassland – Construction Compound – if necessary

Habitat Aid's '*Salisbury Plain Meadow Seed Mix*' or equivalent is to be sown in the construction compound area once the temporary ground protection has been removed. Seeds sourced locally from the Salisbury Plain will retain the character and species assemblage of grasslands in the wider landscape and will improve the chances of successful germination and growth. The methodology below will be followed:

- Sowing will occur at a rate of 4g/m² in the area required, with two equal sowings at right angles to each other and diagonally to the main axis. Seeds may be broadcast manually or by appropriate machinery.
- The seed should be mixed with kiln-dried sand prior to application to prevent clumping and to promote an even spread.
- The seed should not be incorporated or covered; it should be firmed with a roller to ensure good seed-soil contact.
- For areas of newly created grassland, thorough ground preparation is essential to ensure establishment. The aim is to control weeds and produce a good quality seed bed before sowing. The existing vegetation should be cut and removed in late summer/autumn, followed by sufficient cultivation to achieve a weed-free tilth suitable for sowing.
- Sowing should take place immediately after cultivation, as sowing the seeds into a finer tilth gives a better chance of germination. Sowing should take place ideally in the autumn, although early spring is also acceptable. Sowing can be carried out by hand, or by using a tractor mounted fertiliser spreader, seed drill, or slot seeder. Due to the small size of wildflower seeds, it is important to regularly mix the seed within the hopper.
- After sowing, the surface should be raked to settle the seed without burying it. To give good seed-soil contact the ground may be firmed with a roller. In the event of poor establishment in year 1, then over-seeding may be required following further investigation.

The species composition of the *Salisbury Plain Meadow Seed Mix* is presented below in Table 5-3, however similar seeds mixed could be used.



Table 5-3: Habitat Aid's 'Salisbury Plain Meadow Seed Mix' List

Common Name	Scientific Name
Grasses	
Bent	<i>Agrostis sp.</i>
Upright brome	<i>Bromus erectus</i>
Soft brome	<i>Bromus mollis</i>
Crested dog's-tail	<i>Cynosaurus cristatus</i>
Cocksfoot	<i>Dactylis glomerata</i>
Sheep's fescue	<i>Festuca ovina</i>
Forbs	
Common knapweed	<i>Centaurea nigra</i>
Wild carrot	<i>Daucus carota</i>
Eyebright	<i>Euphrasia nemerosa</i>
Lady's bedstraw	<i>Galium verum</i>
Catsear	<i>Hypochoeris radicata</i>
Birdsfoot trefoil	<i>Lotus corniculatus</i>
Black medic	<i>Medicago lupulina</i>
Red bartsia	<i>Odontites verna</i>
Tall broomrape	<i>Orobanche elatior</i>
Hairy plantain	<i>Plantago media</i>
Yellow rattle	<i>Rhinanthus minor</i>
Stitchwort	<i>Stellaria sp.</i>
Wild red clover	<i>Trifolium pratense</i>

6.0 Management Responsibilities

6.1 Overview

Aspire Defence Services Limited (ADSL) has adopted and manages the Army estate on behalf of the Client organisation, the Ministry of Defence. They will continue to manage the estate for the remaining duration (some 15 years) of the 35-year private finance initiative contract. Funding is from central Government.

6.2 Personnel

This LEMP sets out the initial management framework for the first five years following implementation of the landscape scheme within the WBOA. Management requirements will be reviewed at five-year intervals and may be updated where necessary to ensure they remain appropriate, effective and compatible with operational, safety and access constraints.

During the initial establishment period, the landscape scheme will be monitored by suitably qualified professionals, with findings used to guide proportionate adjustments to management on an area-by-area basis. Management prescriptions are intended to be outcome-focused and may be varied where justified, provided the overall landscape and ecological objectives of the scheme are maintained.

All works will be undertaken in accordance with relevant British Standards, Codes of Practice and legislation, and will be implemented in a manner proportionate to site conditions and operational requirements.

Visual inspections will be undertaken periodically during the first five years (typically in spring and autumn) to assess planting health, habitat condition and establishment success, and to



inform management decisions for subsequent periods. The operator will maintain appropriate records of management and monitoring, including a summary of works undertaken and any agreed changes to management approaches.

Management practices will be adapted over time to reflect the increasing maturity of planting and habitats, monitoring results, and unforeseen factors such as extreme weather events, without undermining the intended landscape and ecological outcomes.

7.0 Management Operations

The following section includes outline management operations for the WBOA.

7.1 Annual Management Prescriptions

All vegetation will be managed, with the aims of improving wildlife habitat value. All areas of planting should take account of the below General Management Considerations, and Error! Reference source not found. which details the timings of Main Annual Management Operations. In addition to these tasks many of the proposed vegetation types/new habitats, as well as existing, will require more specific management operations to ensure their longer-term establishment, as discussed in **Section 7.2.2**.

7.2 Management Programme

7.2.1 General Management Operations

Management during the construction phase is laid out in the Construction Environment Management Plan for Biodiversity (CEMP-B)⁴.

All annual maintenance should be undertaken following good horticultural practices and tree works should be undertaken by an approved member of the Arboricultural Association

Cuttings from pruning shall be utilised in log piles (these can be added to the reptile hibernaculum on Site, refer to EMEP³ Figure 3 for locations) and unwanted cuttings shall be removed off Site.

7.2.2 Specific Management Operations

Ongoing maintenance of habitat planting within the red line is detailed in the HMMP¹ for 30 years. Details of the specific management operations within the WBOA are presented below.

Relaxed Management of Grassland (WBOA)

Grassland within the WBOA area will be managed with a relaxed cutting regime to create enhanced habitat for reptiles.

Species indicative of suboptimal condition should be removed, including creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, curled dock *Rumex crispus*, broad-leaved dock *Rumex obtusifolius*, common nettle *Urtica dioica*, creeping buttercup *Ranunculus repens*, greater plantain *Plantago major*, white clover *Trifolium repens*, and cow parsley *Anthriscus sylvestris*. These can be hand pulled or dug out. Check grassland for presence of bracken *Pteridium aquilinum*. If present and hand pull.

During the first year remove any weeds (or species indicative of suboptimal condition as referred to under the above section) before they run to seed, either by topping, mowing or by hand for smaller areas.

In September/ October and again in March, during the first year. Cut the area to 15cm, with arisings removed. Monitor diversity and apply selective thinning of dominant species to



encourage diversity. Leave up to a third of vegetation over winter e.g. near linear features and bases of individual trees. Re-seed where necessary.

After year 1, cut annually in September, removing all arisings. Leave up to a third of vegetation uncut over winter. Mow paths in vegetation regularly for sward variation and access.

Monitor diversity and apply selective thinning of dominant species to encourage diversity.

Proposed seeding of construction compound area (Construction compound) calcareous grass mix containing yellow rattle.

The nurse grasses included in the seed mix and existing grass species, will be the first to establish and will require topping or mowing in March and again in May. All clipping should be removed to ensure the grass canopy does not interfere with the germination and spring growth of the wildflowers.

A third cut should be timed for early August after flowering, which will control the annual weed species and provide sufficient time for the meadow species to establish after they have set seed.

A final cut in the year will be required between the months November -March, with arisings removed to further lower nutrients and prevent grass from becoming dominant. The grassland should be cut down to 50 mm with some smaller areas can be left uncut to provide sward height variation.

Monitoring of seeded grassland to be undertaken during the initial establishment period (for the construction compound area) to ensure target results are achieved. Any observations noted should be considered to update prescribed longer-term management operations as appropriate.

Other neutral grassland

During the first year remove any weeds (or species indicative of suboptimal condition as referred to under the above section) before they run to seed, either by topping, mowing or by hand for smaller areas.

In September/ October and again in March, during the first year. Cut the area to 15cm, with arisings removed. Monitor diversity and apply selective thinning of dominant species to encourage diversity. Leave up to a third of vegetation over winter e.g. near linear features and bases of individual trees. Re-seed where necessary.

After year 1, cut annually in September, removing all arisings. Leave up to a third of vegetation uncut over winter. Mow paths in vegetation regularly for sward variation and public access.

Monitor diversity and apply selective thinning of dominant species to encourage diversity.

Proposed planting of native trees

Plant failures will be reported to the landscape architect/ecologist and the plants removed immediately. Plant replacements will be carried out in the following suitable planting season using plants of a similar size to those adjacent (noting this may be larger than the original specification), or an alternative agreed with the landscape architect.

Proposed planting of native hedgerow species

Plant failures will be reported to the landscape architect/ecologist and the plants removed immediately. Plant replacements will be carried out in the following suitable planting season using plants of a similar size to those adjacent (noting this may be larger than the original specification), or an alternative agreed with the landscape architect.



Habitat management of hedgerows will take into consideration of nesting bird restrictions.

Proposed planting of mixed scrub species

Habitat management of scrub will take into consideration of nesting bird restrictions.

Minimal management is required within 5 years of planting for the scrub, however this will be monitored for success of newly added species and to prevent too much encroachment on the grassland areas.

Proposed installation of bat boxes and reptile hibernacula

In total 10 refugia should be created within the WBOA at appropriate spacing from each other and in appropriate areas where maintenance of the surrounding grassland area is achievable. The layout and further details are detailed in the EMEP³ report Figure 3.

7.3 Management Programme

Table 7-1: Monthly Management Operations on the following pages provides a list of key maintenance operations for each of the proposed vegetation/habitat types for Year 1 to 5 of plant establishment and illustrates the anticipated frequency (on a monthly basis) that operations are required.

Table 7-1: Monthly Management Operations

Action	J	F	M	A	M	J	J	A	S	O	N	D
Proposed trees												
Removal of dead, dying or diseased wood.											✓	
Replacement of dead, missing, dying or defective plants.											✓	
Weeding around new trees.							✓	✓	✓			
Removal of self-sown trees by digging up or use of suitable herbicides.							✓					
Check and re-adjust tree guards and adjust as necessary.			✓									
Formative pruning and trimming back from roads or paths.										✓	Or ✓	
Proposed native hedgerows												
Hand weeding around new plants, keep bases weed free ensuring minimal disturbance of understorey planting.			✓		✓		✓		✓			
Check guards and stakes where present.			✓									
Hedgerow siding up on rotation (from year 3 onwards once established).	✓											
Adjustments to ensure plants remain upright.			✓									
Pruning to remove any dead, dying or diseased wood and suckers.			✓			✓			✓			
Replacement of dead or defective new planting.										✓		
Once established, cut in height and sides to be cut back to a tidy appearance.											✓	



Action	J	F	M	A	M	J	J	A	S	O	N	D
Cut back plants adjacent to signs and to avoid obscuring sightlines.										✓		
Removal of self-sown trees by digging up or use of suitable herbicides.							✓					
Removal of fallen leaves.											✓	✓
Proposed calcareous grassland												
Annual autumn cut, removing arisings. Leave up to a third of vegetation over winter.									✓			
Mow paths to establish sward diversity.			✓		✓		✓		✓			
Other neutral grassland												
Annual autumn cut, removing arisings. Leave up to a third of vegetation over winter.									✓			
Mow paths to establish sward diversity.			✓		✓		✓		✓			
Ecological features												
Once trees are established and suitably mature, undertake bat surveys of trees with bat roost potential that require management. If works undertaken in the breeding bird season – a nest check will be required (March to August)	As required											
Check condition of ecological features and replace/reinstate on an annual basis.								✓	✓			
All Areas												
Complete monitoring report from year before	✓											
Inspect bat boxes and hibernacula habitats and replace/reinstate as necessary.										✓		
Litter collection as required – during routine maintenance			✓			✓					✓	
Check for INNS or noxious plants, remove of treat appropriately if present – during routine maintenance			✓		✓		✓		✓			
Visual inspection of vegetation and habitats.					✓	✓	✓					
Replacement planting if required –avoiding winter frosts.			✓	✓						✓	✓	

8.0 Monitoring Operations

Monitoring checks will need to be undertaken each year for the initial 5 years post-construction to ensure the mitigation measures are functioning as intended. This will include



monitoring the usage and condition of ecological features (bird and bat boxes, and reptile hibernacula), with repair and replacement carried out where necessary during the autumn.

Monitor the establishment within the WBOA (including the construction compound area shown in the Landscaping plan) and take remedial action where required. Remedial actions include control of weed/ruderal species, removal of non-native invasive species, or management of scrub encroachment.

Following the monitoring checks and surveys in Years 1 and 3 and 5 a report should be provided to the Site owner/operator summarising actions undertaken as part of this plan and setting out any recommendations arising from monitoring including specific recommendations on remedial management actions. Fixed point photography should be used to assist with monitoring change.

Upon completion of the initial 5-year management period, an updated Plan will be developed for an additional 5 years, and every subsequent 5 years for the duration of the operational life of the scheme.

Table 8-1- Prescribed habitat monitoring requirements

Habitat Type	Monitoring Methods	Monitoring Interval and Timing
Other calcareous grassland	To be undertaken on all other calcareous grassland. Undertake 3x quadrat sampling to identify the habitat type that is establishing and then number of species per m ² . Estimate percentage of bare ground, bramble and bracken cover. Collect a botanical species list across grassland to check against target species list. UKHab survey methodology and condition assessment.	Annually from years 1, 3 and 5, then every 5 years. Surveys to be completed between May and August.
Other neutral grassland	To be undertaken on all other neutral grassland parcels. Undertake 3 x quadrat sampling to identify the habitat type that is establishing and then number of species per m ² . Estimate percentage of bare ground, bramble and bracken cover. Collect a botanical species list across grassland to check against target species list. UKHab survey methodology and condition assessment. Photographic evidence recorded.	Annually from years 1, 3 and 5, then every 5 years. Surveys to be completed between May and August.
Mixed scrub	Undertake a condition assessment for mixed scrub. Record failed planting. Collect a botanical species list.	Years 1, 3, 5. Surveys to be completed between May and August.



Habitat Type	Monitoring Methods	Monitoring Interval and Timing
	UKHab survey methodology and condition assessment. Photographic evidence recorded.	
Hedgerow	To be undertaken on all planted hedgerows. Undertake a condition assessment for hedgerows. Record failed plants. Collect a botanical species list. UKHab survey methodology and condition assessment. Photographic evidence recorded	Years 1, 3, 5. Surveys to be completed between May and August.
Individual trees	To be undertaken on all individual planted trees and hedgerow planted trees. Undertake a condition assessment for individual trees. Record failed planting. UKHab survey methodology and condition assessment. Photographic evidence recorded.	Years 1, 3, 5. Surveys to be completed between May and August.





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