

Habitat Management and Monitoring Plan (HMMP)

Version 4

17.03.2025

Irwell St Bury

Habitat Management and Monitoring Plan

Planning condition number 10 states the following:

The development shall not commence until a Habitat Management and Monitoring Plan (the HMMP), prepared in accordance with the approved Biodiversity Gain Plan and including:

- 1. a non-technical summary;*
- 2. the roles and responsibilities of the people or organisation(s) delivering the HMMP;*
- 3. the planned habitat creation and enhancement works to create or improve habitat to achieve the biodiversity net gain in accordance with the approved Biodiversity Gain Plan;*
- 4. the management measures to maintain habitat in accordance with the approved Biodiversity Gain Plan for a period of 30 years from the completion of development; and*
- 5. the monitoring methodology and frequency in respect of the created or enhanced habitat to be submitted to the local planning authority. has been submitted to, and approved in writing by, the local planning authority. This condition can be satisfied in phases.*

Reason. To ensure the development delivers a biodiversity net gain on site in accordance with Schedule 7A of the Town and Country Planning Act 1990 and Places for Everyone Joint Development Plan Policy JP-G8 A Net Enhancement of Biodiversity and Geodiversity.

1. a non-technical summary;

In order to determine the overall gain / loss for the two phases a combined metric has been produced and is contained within the Biodiversity Gain Plan. The results from the combined metric are that both phases have a minus 27.39% result in biodiversity units and trading rules are not satisfied. The overall scheme is unit deficit of 1.04 of a

single biodiversity unit for both phases, in order to reach the mandatory 10%. The applicant will therefore seek off site credits to reach the mandatory 10%.

2. the roles and responsibilities of the people or organisation(s) delivering the HMMP;

The developer will have overall responsibility for the appointment of suitable organisations to deliver the HMMP.

The head of development at Exemplar (Mr Steve Rigby) shall be responsible for these appointments.

A suitable landscape contractor and ecologist to monitor the works are required.

It is noted that planning condition 11 requires the following:

The development hereby approved shall not be occupied unless and until:

1. the habitat creation and enhancement works set out in the approved HMMP have been completed; and

2. a completion report, evidencing the completed habitat enhancements, has been submitted to, and approved in writing by the Local Planning Authority The created and/or enhanced habitat specified in the approved HMMP shall be managed and maintained in accordance with the approved HMMP. This condition can be satisfied in phases.

3. the planned habitat creation and enhancement works to create or improve habitat to achieve the biodiversity net gain in accordance with the approved Biodiversity Gain Plan;

Urban trees

30no. small urban street trees are to be planted within the site which will require management to ensure they are protected and healthy whilst also ensuring the health and safety of the public and property whilst meeting 'moderate' condition. The following sets out the UKHAB criteria as to what is considered to be moderate condition street trees.

Aims:

- More than 70% of trees are native species.

- There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use.
- Management regime has encouraged micro-habitat sites for birds, mammals, and insects e.g., presence of deadwood, cavities, or loose bark etc.
- Trees are immediately adjacent to other vegetation, and tree canopies are oversailing vegetation beneath.

Management:

- Remove tree guards at 5 year mark as they can start to hamper growth or pollute the environment.
- Trees should only be pruned/cut back when necessary to prevent risks to public health, damage to property or if they are blocking footpaths or roads.
- Arisings produced from tree management should be used to create dead wood habitat and shelters within designated areas such as the scrub habitat.

Monitoring:

- Inspect tree guards for damage, ensuring they are upright and in sound condition annually.
- Inspect and replace dead or missing trees annually.
- Habitat will be monitored for controlled and/or invasive species annually and appropriate action taken to remove if found.

Neutral grassland

Other neutral grassland contains perennial ryegrass *Lolium perenne* cover at less than 30% with 9-15 species per meter square present

Recommended Seed Mixes:

- Emorsgate Seeds EM3 Special General Purpose Meadow Mixture.
- Emorsgate Seeds EH1F Wildflowers for Hedgerows – for shaded areas.
- Emorsgate Seeds EM8F Meadow Mixture for Wetlands– for wetter areas.

Considerations

- If soil is being imported into the site, then nutrient poor soil should be used to create wildflower areas in order to support the establishment of the meadow.
- Don't add fertiliser as this will increase fertility of the soil and negatively impact the wildflower meadow.
- Reducing soil fertility : Spread limestone chippings

Creation Methodology:

- Create a fine tilth for a seedbed by digging or rotovating the soil then firming and raking.
- Sow seed mixture evenly by hand at 5g per square meter during, late summer/early autumn.

Additional Methodology:

- Designate some areas of grassland for creation of a calcareous species sward with thin poor soils and good drainage. These areas should be managed in line with 'other neutral grassland' once established.
- Remove topsoil and spread limestone chippings.
- Translocation of soils from habitats within the site to be removed by development should be carried out by an experienced contractor alongside Suitably Qualified Ecologist (SQE) who can identify appropriate soils.

The created other neutral grassland areas within the site will require regular monitoring and annual maintenance to achieve 'moderate' condition, allowing the more desirable species to flourish and to reduce the presence of unwanted species that will attempt to colonise the area. The following sets out the UKHAB criteria as to what is considered to be a moderate condition other neutral grassland.

Aim:

- The grassland is a good representation of the habitat type it has been identified as, based on its UKHab description - the appearance and composition of the vegetation closely matches the characteristics of the specific grassland habitat type. Indicator species listed by UKHab for the specific grassland habitat type are consistently present.

Note - this criterion is essential for achieving Moderate condition for non-acid grassland types only.

- Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds, and small mammals to live and breed.
- Cover of bare ground between 1% and 5% of total habitat area to provide an important resource to insects.
- Cover of bracken is less than 20% and cover of scrub is less than 5%.
- There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of species indicative of sub optimal condition and physical damage (such as excessive poaching, damage from machinery use or storage) accounts for less than 5% of total area.
- There is greater than 9 species per meter squared. This shall be made up of less than 30% *Lolium perenne*. Indicator species are False Oat grass, Common bent, Yorkshire fog, Cocks foot, yarrow species

Management:

- For the first year of growth, cut to 5cm in May, then cut every 2 months or when sward reaches approximately 15cm. Stop cutting by August to allow wildflowers to seed. Final cut to 5cm will be in October.

- From the second year onwards, cut to 5cm in March or April, then make a second cut to 5cm in October.
- From the second year onwards, designate some areas to receive a cut to 5cm during August in order to produce a more varied habitat that will encourage different species of wildflower.
- Remove all arisings from the area, dispose of in designated areas such as a compost heap.

Modified grassland

The created modified grassland areas within the site will require regular monitoring and annual maintenance to achieve 'moderate' condition, allowing the more desirable species to flourish and to reduce the presence of unwanted species that will attempt to colonise the area. The following sets out the UKHAB criteria as to what is considered to be a moderate condition modified grassland.

- There are 6-8 vascular plant species per m² including at least 2 forbs.

Note - this criterion is essential for achieving Moderate condition.

- Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds, and small mammals to live and breed.
- Some scattered scrub (including bramble *Rubus fruticosus* agg.) may be present, but scrub accounts for less than 20% of total grassland area.
- 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.
- Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).
- Cover of bracken *Pteridium aquilinum* is less than 20%.

- There is an absence of invasive non-native plant species³ (as listed on Schedule 9 of WCA4).

Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.

Objectives:

- To create a level, attractive and even grass sward with uniform colour and height.
- To enhance appearance and visual interest.

Maintenance Operations:

- Maintain a sward length within the limits of 30-60mm and edges kept neat and tidy.
- Remove arisings from site. Arisings shall also be removed from all paths and roads and taken off site.
- When necessary, grass areas shall be sprayed with a suitable approved selective herbicide in accordance with the manufacturer's recommendations to control injurious or invasive weeds. Alternatively spot treatment of isolated weed growth may be carried out by hand. All arisings shall be removed from site.
- Reinstatement by re seeding of damaged, defective or bare areas shall be carried out as appropriate. Any dips or holes within the grass shall be filled as above to restore even falls and re seeded if necessary.
- Where necessary compacted areas shall be aerated with the appropriate equipment in the autumn.
- At no time shall machinery get closer than 500mm to any tree trunk. Damage must be avoided to trunks when using a strimmer.
- Depressions to be filled in over time by adding a top dressing and over seeding, using a sandy soil
- Collect litter and dispose off site on each visit

Introduced shrub

There is no condition assessment required for introduced shrub

4 The management measures to maintain habitat in accordance with the approved Biodiversity Gain Plan for a period of 30 years from the completion of development;

Modified grass

Objectives:

- To create a level, attractive and even grass sward with uniform colour and height.
- To enhance appearance and visual interest.

Maintenance Operations:

- Maintain a sward length within the limits of 30-60mm and edges kept neat and tidy.
- Remove arisings from site. Arisings shall also be removed from all paths and roads and taken off site.
- When necessary, grass areas shall be sprayed with a suitable approved selective herbicide in accordance with the manufacturers recommendations to control injurious or invasive weeds. Alternatively spot treatment of isolated weed growth may be carried out by hand. All arisings shall be removed from site.
- Reinstatement by re seeding of damaged, defective, or bare areas shall be carried out as appropriate. Any dips or holes within the grass shall be filled as above to restore even falls and re seeded if necessary.
- Where necessary compacted areas shall be aerated with the appropriate equipment in the autumn.
- At no time shall machinery get closer than 500mm to any tree trunk. Damage must be avoided to trunks when using a strimmer.
- Depressions to be filled in over time by adding a top dressing and over seeding, using a sandy soil.
- Collect litter and dispose off site on each visit.

Native hedge planting

Objectives:

- To ensure early establishment and healthy development.
- To create well established hedgerows with connectivity to other important biodiversity elements.
- To enhance biodiversity.
- To enhance appearance and visual interest.

Maintenance Operations:

- In the first two years of planting, new hedgerow plants are to be monitored at each maintenance visit to ensure they are upright, firm, and stable and in good health.
- Checks shall be made to ensure all stakes / grow tubes of hedgerow plants are properly adjusted. Removal of grow tubes is dependent on plant development but generally, occurs years 3-5.
- Hedgerows should be maintained and watered to field capacity throughout the first and second years of planting. They should be watered by hose or irrigation drip lines.
- Careful monitoring during watering shall be necessary to minimise risk of failures, leaks or damage to property.
- Any damaged or dying plants are to be replaced in the following dormant season.
- Hedgerows should be maintained in a grass free strip 75cm wide for the first 3 years or until established.
- Hedgerows should be pruned to a height of 1250mm high by 750mm wide, pruning to take place Autumn and Spring, outside of the nesting season.

Introduced shrub

Objectives:

- To ensure early establishment and healthy growth.
- To maintain a dense canopy cover.
- To maintain year round appearance and visual interest.

Maintenance operations:

- All shrub beds shall be maintained substantially free of weeds. Work shall be done either manually or with appropriate selective weed killer in accordance with the manufacturer's recommendations. If weed killer is used the dead weeds shall be removed at the next maintenance visit. Care must be taken to avoid damage to adjacent planting and grass and replaced immediately if affected by weed killer.
- Once established shrubs shall be selectively thinned or reduced in height as appropriate by removal or pruning to allow room for growth and avoid overcrowding / overshading and create a natural form rather than a cube or cloud shape. Care shall be taken to avoid over pruning and so creating obvious gaps in the shrub beds.
- Ground cover plants shall be clipped or pruned if necessary to give a neat and tidy finish and contained within the shrub bed. Work to remove dead vegetation shall be carried out during the winter months.
- For most herbaceous species a single cut can be carried out in early spring after the risk of frost has passed (generally March onwards). Leaving dried flowers over winter periods visual interest and provides a food source for seed eating birds and insects. Shelter is also found for wildlife in dead foliage over winter.

Pruning of herbaceous planting:

- In spring cut stems close to the crown or dormant top of the plant, avoiding the removal of new shoots.
- Tidy up the base of the plant, removing dead foliage and debris.
- Remove all material from site.

- Apply a 50mm layer of fine horticultural mulch. This will help moisture retention in the soil and contribute to weed suppression and allow delicate stems to grow.
- Leave dried flower heads over winter for relevant species ie Ornamental grasses.

Fertilising:

- One application, just before or at the time of spring growth.
- A balanced fertiliser is required, one high in Phosphorous. Fertilisers high in nitrogen should not be used. NPK 10-20-10 balance would be suitable.

Litter Collection:

- Collect litter and dispose off site on each visit.

Neutral grassland

The created other neutral grassland areas within the site will require regular monitoring and annual maintenance to achieve 'moderate' condition, allowing the more desirable species to flourish and to reduce the presence of unwanted species that will attempt to colonise the area. The following sets out the UKHAB criteria as to what is considered to be a moderate condition other neutral grassland.

Aim:

- The appearance and composition of the vegetation closely matches characteristics of UKHAB type definition. Indicator species are easily and clearly visible throughout the sward.
- Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds, and small mammals to live and breed.
- Cover of bare ground between 1% and 5% of total habitat area to provide an important resource to insects.
- Cover of bracken is less than 20% and cover of scrub is less than 5%.
- There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of species indicative of sub optimal condition and

physical damage (such as excessive poaching, damage from machinery use or storage) accounts for less than 5% of total area.

- There is greater than 9 species per meter squared.

Management:

- For the first year of growth, cut to 5cm in May, then cut every 2 months or when sward reaches approximately 15cm. Stop cutting by August to allow wildflowers to seed. Final cut to 5cm will be in October.
- From the second year onwards, cut to 5cm in March or April, then make a second cut to 5cm in October.
- From the second year onwards, designate some areas to receive a cut to 5cm during August in order to produce a more varied habitat that will encourage different species of wildflower.
- Remove all arisings from the area, dispose of in designated areas such as a compost heap.

5. the monitoring methodology and frequency in respect of the created or enhanced habitat to be submitted to the local planning authority has been submitted to, and approved in writing by, the local planning authority. This condition can be satisfied in phases.

The standard time to target condition for each proposed habitat is as stated below and therefore monitoring of these habitats will be over the stated time provided by the metric as follows Urban trees (27 years), Other neutral grassland (5), modified grassland (4), Introduced shrub (1)

All monitoring visits shall be conducted annually within an appropriate season for the condition assessment to be undertaken.

Appendix 1 Existing baseline habitat plans