

Biodiversity Gain Plan (BGP) and Habitat Management and Monitoring Plan (HMMP)

Version 1

04.11.2024

Irwell St Bury Application No 70565 dated 30.09.24

The above development has been approved and planning condition number 9 states:

An Overall Biodiversity Gain Plan shall be submitted to and approved in writing by the Local Planning Authority before the development is commenced.

The Biodiversity Gain Plan shall be prepared in accordance with the Assessment of Biodiversity - Biodiversity Net Gain (BNG) Version 5 29/08/2024 prepared by Simon Brain and must include:

- 1. information about the steps taken or to be taken to minimise the adverse effect of the development on the biodiversity of the onsite habitat and any other habitat;*
- 2. the pre-development biodiversity value of the entire onsite habitat;*
- 3. any registered offsite biodiversity gain allocated or proposed to be allocated to the entire development and the biodiversity value of that gain in relation to the development.*
- 4. any biodiversity credits purchased or proposed to be purchased for the entire development; and*
- 5. the post-development biodiversity value of the onsite habitat for the entire development and each phase of development.*

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

Biodiversity Gain Plan

My name is Simon Brain I am the person completing this BGP.

The steps taken to minimise the development impact are as follows:

The on-site habitats are sparsely vegetated land (ephemeral/ruderal) in poor condition providing an on-site baseline of 0.76 habitat units. Because the baseline is a relatively low value habitat scoring comparatively low biodiversity units the site has been designed for biodiversity within landscape planning. There have been a series of Biodiversity Net Gain reports for this site. Version 1 dated 27.02.2024 detailed % increase of 6.49% working up to Version 5 which details an acceptable 15.42% increase and satisfies trading rules. This has been an iterative process of introducing habitats to achieve the mandatory 10%.

The pre-development biodiversity value of the entire onsite habitat

The pre-development biodiversity value of the on-site habitat is 0.76 units and 0.06 hedgerow units.

On-site baseline	Habitat units	0.76
	Hedgerow units	0.06
	Watercourse units	0.00

Any registered offsite biodiversity gain allocated or proposed to be allocated to the entire development and the biodiversity value of that gain in relation to the development

The development does not require any off site mitigation in relation to net gain

Any biodiversity credits purchased or proposed to be purchased for the entire development

There is no biodiversity credits required for this scheme

The post-development biodiversity value of the onsite habitat for the entire development and each phase of development.

The on-site post intervention habitat is 0.88 habitat units and 0.54 hedgerow units. Therefore, it is not the intention of the applicant to purchase statutory credits.

On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.88
	Hedgerow units	0.54
	Watercourse units	0.00

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;

The site has an overall low value habitat unit because of the type of habitat present on the site. The pre-development biodiversity value of the on-site habitat is 0.76 units and 0.06 hedgerow units. The scheme does not retain any of this habitat and therefore to achieve the mandatory 10% the scheme has designed on site habitat to achieve the mandatory gain. The proposed landscape plans for this site are included in the appendix, which detail the provision of urban trees, neutral grassland, modified grassland, hedgerow, introduced shrub and urban sealed surfacing. The breakdown of these areas is presented in the approved Biodiversity Net Gain (BNG) Version 5 29/08/2024 and reproduced below.

REF	LSCP DESCRIPTION	BNG DESCRIPTION	HECTARE / NO.
1	TREES	SMALL	28
2	WILDFLOWER	NEUTRAL GRASSLAND	0.032
3	AMENITY GRASSLANDS	MODIFIED GRASSLAND	0.012
4	NATIVE HEDGROWS	NATIVE HEDGROWS	165Lm
5	SHRUB BEDS	URBAN INTRODUCED SHRUBS	0.039
6	URBAN SEALED SURFACES	URBAN SEALED SURFACES	0.298
TOTAL HA:			0.381

The on-site proposals have resulted in the following final results

Area habitat summary	
Total Net Unit Change	0.12
Total Net % Change	15.42%
Trading Rules Satisfied	Yes ✓
Area Check	Area Acceptable ✓

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

28no. 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

The created other neutral grassland areas (total coverage 0.036ha) 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.

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 (total coverage 0.063ha) 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.

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.

Proposed habitat	Area (hectares)	Standard time to target condition (years)
Individual trees - Urban tree	0.114	27
Grassland - Other neutral grassland	0.036	5
Grassland - Modified grassland	0.063	4
Urban - Introduced shrub	0.037	1
Urban - Developed land; sealed surface	0.243	0

All monitoring visits shall be conducted annually within an appropriate season for the condition assessment to be undertaken. When the monitoring has been conducted the report shall be submitted to the LPA.

Appendix 1 – Proposed landscape plans

