

Biodiversity Enhancement & Management Plan

28/01/2026



*This Biodiversity Enhancement and Management Plan (BEMP) sets out the delivery, management and long-term maintenance of biodiversity enhancements associated with the Huddersfield Student Scheme. The proposals are centred on the creation of an intensive green roof, which will replace an existing sealed surface and deliver an on-site biodiversity net gain of **11.01%**. The BEMP secures the implementation, monitoring and management of the habitat for a minimum period of 30 years in accordance with approved ecological assessments and planning requirements.*

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Executive Summary

This Biodiversity Enhancement and Management Plan (BEMP) has been prepared in support of the proposed redevelopment of the Huddersfield Student Scheme (former Crown House) and has been produced to discharge the relevant planning condition relating to biodiversity enhancement, management and monitoring.

The BEMP has been informed by the approved Extended Phase 1 Habitat Survey & Daytime Bat Survey (2023) and Biodiversity Impact Assessment (2023), which identify the ecological baseline, constraints and biodiversity net gain (BNG) strategy for the site. These reports confirm that the site is located within a highly constrained urban environment with limited opportunities for ground-level habitat creation and that biodiversity enhancement is therefore delivered primarily through roof-level habitat creation.

The principal biodiversity enhancement proposed is the creation of an intensive green roof on the lower roof of the building, covering approximately 0.048 hectares. The green roof will replace an existing sealed surface of negligible ecological value and will be planted with a structurally diverse species mix designed to tolerate exposed roof-level conditions, including wind, driving rain, frost and periods of drought. The planting scheme comprises approximately 70% UK native species and 30% non-native species known to provide biodiversity benefits in the UK.

The green roof will deliver multiple ecological functions, including:

- Creation of new semi-natural habitat within a dense urban setting
- Provision of foraging habitat for invertebrates
- Indirect foraging benefits for birds and bats
- Nesting and shelter opportunities for urban-tolerant bird species

Although the building has been confirmed to have negligible potential for roosting bats, the green roof will provide enhanced foraging opportunities for bats through increased invertebrate abundance. Bat use of the roof is likely to be influenced by surrounding artificial lighting, with the roof located at a height comparable to nearby street lighting; however, the habitat represents a clear improvement over baseline conditions.

A Peregrine Falcon has been recorded using the roof as a perching location only. The BEMP includes measures to retain this function and to protect it from unnecessary disturbance by restricting roof access to essential maintenance activities.

The approved Biodiversity Impact Assessment confirms that the development will deliver an overall on-site biodiversity net gain of 11.01%, achieved through the creation and management of the intensive green roof. This BEMP provides the mechanism by which the assumptions used within the Defra Biodiversity Metric are secured and maintained over the long term.

1. Introduction and Purpose

1.1 Background and Site Context

This Biodiversity Enhancement and Management Plan (BEMP) has been prepared in support of the proposed redevelopment of the Huddersfield Student Scheme (former Crown House), located within Huddersfield town centre. The site is situated within a highly urbanised environment and is characterised by buildings, sealed surfaces and limited areas of vegetation.

The BEMP has been informed by, and should be read in conjunction with, the following approved ecological reports:

- Extended Phase 1 Habitat Survey & Daytime Bat Survey (2023)
- Biodiversity Impact Assessment (2023)

These documents establish the ecological baseline for the site, identify relevant ecological constraints, and confirm that opportunities for meaningful biodiversity enhancement at ground level are limited due to the urban context. As a result, biodiversity enhancement is delivered primarily through roof-level habitat creation, namely the provision of an intensive green roof.

1.2 Purpose of the BEMP

The purpose of this BEMP is to provide a clear and enforceable framework for:

- The implementation of approved biodiversity enhancements;
- The long-term management and monitoring of those enhancements; and
- The securing and maintenance of biodiversity net gain for the lifetime of the development.

The BEMP has been prepared to satisfy the requirements of the relevant planning condition and sets out how the biodiversity measures identified within the approved ecological reports will be delivered, monitored, reviewed and funded.

1.3 Biodiversity Net Gain Position

The Biodiversity Impact Assessment (2023) confirms that the proposed development, including the creation of an intensive green roof, will result in an overall on-site biodiversity net gain of 11.01%, as calculated using the Defra Biodiversity Metric.

The net gain is achieved through:

- The retention of existing habitats where possible; and
- The creation of approximately 0.048 hectares of Urban – Intensive Green Roof habitat, which is predicted to reach moderate condition within three years and contribute 0.17 habitat units.

This BEMP provides the mechanism by which the biodiversity assumptions used within the metric calculation are secured and maintained over the long term, ensuring that the reported net gain remains valid beyond the construction phase.

1.4 Scope of the BEMP

This BEMP applies to the following biodiversity features associated with the development:

- The intensive green roof located on the lower roof of the building;
- Associated biodiversity enhancements integrated into the building fabric; and
- Management measures designed to protect and enhance existing ecological features, including a Peregrine Falcon perching location.

The BEMP does not reassess baseline ecological conditions or repeat survey findings, which are fully documented within the approved ecological reports. Instead, it focuses on implementation, management, monitoring and review.

1.5 Protected Species Context

Bats

Bat surveys undertaken as part of the approved ecological assessment confirmed that the building has negligible potential for roosting bats, with no suitable roosting features present and no evidence of bat activity recorded. As such, no bat mitigation is required to facilitate the development.

Notwithstanding the above, the proposed intensive green roof will provide enhanced foraging habitat for bats through the creation of structurally diverse vegetation that supports a rich invertebrate assemblage. This foraging value is particularly relevant in an otherwise heavily built-up environment.

Bat use of the green roof is likely to be influenced by surrounding artificial lighting, with the roof located at a similar height to nearby street lighting columns. While this may limit bat activity compared to unlit or darker habitats, the green roof nonetheless represents a net improvement in foraging resource availability at roof level when compared to the existing sealed surface.

Birds (Including Peregrine Falcon)

A Peregrine Falcon has been recorded using the roof of the building as a perching location, with nesting confirmed to occur elsewhere off-site. The perching function of the roof will be retained, and management of the green roof will ensure that:

- Existing perching opportunities are not removed or obstructed;
- Regular access to the roof is restricted to essential maintenance only; and
- Unnecessary disturbance is avoided, particularly during the breeding season.

The creation of the intensive green roof will also provide new nesting and foraging opportunities for urban-tolerant bird species, with structurally diverse planting offering shelter, cover and feeding resources.

1.6 Plan Duration and Review

This BEMP will be implemented for a minimum period of 30 years following completion of the development. The plan will be reviewed and, where necessary, updated every five years to ensure that biodiversity objectives continue to be met and that the habitat remains in favourable condition.

2. Description and Evaluation of Features to be Managed and Enhanced

2.1 Overview

The primary biodiversity feature to be managed and enhanced under this Biodiversity Enhancement and Management Plan (BEMP) is the intensive green roof proposed on the lower roof of the Huddersfield Student Scheme building.

The selection of this feature reflects the conclusions of the approved ecological assessments, which identify the site as being located within a highly constrained urban environment, where opportunities for meaningful habitat creation at ground level are limited. In this context, roof-level habitat creation represents the most effective and deliverable means of achieving biodiversity enhancement and net gain.

2.2 Description of the Intensive Green Roof

The intensive green roof will comprise a structurally diverse vegetated system, incorporating:

- A variable-depth growing substrate capable of supporting grasses, herbaceous perennials and low shrubs
- A diverse planting mix designed to maximise biodiversity value while tolerating exposed roof-level conditions
- Microhabitat variation through changes in substrate depth, plant structure and species composition

The green roof will be installed on an area of approximately 0.048 hectares and is classified as Urban – Intensive Green Roof in accordance with the Defra Biodiversity Metric.

2.3 Ecological Function and Value

The intensive green roof will provide the following ecological functions:

- Creation of new habitat in a previously sealed, low-value environment
- Foraging habitat for invertebrates, supported by a diverse and extended flowering season
- Foraging opportunities for bats, through increased invertebrate abundance at roof level
- Nesting and shelter opportunities for urban bird species, facilitated by structurally complex planting
- Indirect support for higher trophic levels, including birds and bats

While the roof is located at a height comparable to nearby street lighting, which may constrain bat activity relative to darker environments, the provision of vegetated habitat nonetheless represents a significant improvement over the existing baseline and contributes positively to local ecological networks.

2.4 Peregrine Falcon Perching Feature

The roof of the building has been recorded as being used by a Peregrine Falcon as a perching location, rather than a nesting site. This feature is considered to be of ecological importance at a local level and will be retained and protected as part of the development.

Management of the green roof will ensure that:

- Existing perching opportunities remain unobstructed.
- Vegetation height and layout do not interfere with established perching behaviour; and
- Regular disturbance of the roof area is avoided, with access restricted to essential maintenance only.

2.5 Evaluation Against Baseline Conditions

The approved ecological reports identify the existing roof as being of negligible ecological value, consisting of sealed surfaces with no habitat function.

In contrast, the proposed intensive green roof represents a clear and measurable enhancement, delivering:

- Increased habitat distinctiveness
- Improved ecological functionality
- Long-term biodiversity value secured through management

This enhancement underpins the achievement of an overall on-site biodiversity net gain of 11.01%, as confirmed within the approved Biodiversity Impact Assessment.

2.6 Long-Term Importance of the Feature

The intensive green roof is not intended as a short-term or decorative feature, but as a permanent element of the site's green infrastructure. Its long-term ecological value is dependent on:

- Appropriate initial establishment;
- Ongoing management and monitoring; and
- Periodic review to ensure objectives continue to be met.

These requirements are addressed in subsequent sections of this BEMP.

3. Extent and Location of Works

3.1 Location of Biodiversity Enhancements

The biodiversity enhancement works proposed under this Biodiversity Enhancement and Management Plan (BEMP) are confined to the lower roof of the Huddersfield Student Scheme building (former Crown House), as shown on the approved Proposed Site Plan submitted with the planning application.

The enhancement area is entirely contained within the red line boundary of the development and does not extend into adjacent land or third-party ownership.

3.2 Extent of the Intensive Green Roof

The intensive green roof will occupy an area of approximately 0.048 hectares, corresponding exactly with the area modelled within the approved Biodiversity Impact Assessment (2023) and Defra Biodiversity Metric calculations.

The green roof will be implemented on a previously sealed roof surface, which currently provides negligible ecological value. No existing vegetated habitat will be lost as a result of the enhancement works.

3.3 Relationship to Other Site Features

The location of the green roof has been selected to:

- Maximise biodiversity enhancement within a constrained urban site;
- Avoid conflict with building services and access requirements;
- Retain existing Peregrine Falcon perching locations; and
- Minimise regular human disturbance by restricting access to maintenance activities only.

The roof is located at a height comparable to surrounding street lighting and adjacent buildings. While this limits opportunities for the creation of dark corridors, the roof nonetheless provides an improved ecological resource relative to baseline conditions.

3.4 Scale and Mapping

The extent and location of the green roof are illustrated on the approved site drawings, including:

- Proposed Site Plan
- Roof Layout Plan (where applicable)

These drawings define the precise boundaries of the enhancement area and should be used in conjunction with this BEMP to guide implementation.

No additional habitat creation or enhancement areas are proposed beyond those identified on the approved plans.

3.5 Construction Interface

The installation of the intensive green roof will be coordinated with the wider construction programme to ensure:

- Protection of installed biodiversity features during works;
- Avoidance of unnecessary disturbance to the roof once planted; and
- Compliance with the management objectives set out in this BEMP.

Any temporary access required during installation will be removed upon completion, with long-term access restricted to essential maintenance only.

4. Ecological Trends and Site Constraints Influencing Management

4.1 Urban Context and Baseline Limitations

The site is located within a dense urban environment in Huddersfield town centre, characterised by extensive built form, sealed surfaces and artificial lighting. The approved ecological assessments confirm that baseline ecological value across the site is low and that habitat connectivity with surrounding green spaces is limited.

As a result, the biodiversity enhancements proposed under this BEMP have been designed to function as standalone urban habitat, capable of delivering ecological value independently of wider habitat networks.

4.2 Exposure and Microclimatic Conditions

The intensive green roof is located at roof level and will be subject to:

- High wind exposure
- Driving rain
- Periods of summer drought
- Winter frost and wind chill

These conditions impose clear constraints on species selection and management. The planting strategy therefore prioritises species that are:

- Wind-tolerant and structurally robust
- Able to withstand periods of water stress and saturation
- Adapted to shallow or variable substrates

This approach reduces the risk of establishment failure and long-term degradation of habitat condition.

4.3 Artificial Lighting

The roof is located at a height comparable to nearby street lighting and adjacent illuminated structures. Artificial lighting represents a constraint on nocturnal species, particularly bats, by reducing the suitability of the roof as a dark commuting or foraging corridor.

However, the green roof nonetheless provides an improved foraging resource through increased invertebrate abundance compared to the existing sealed roof. Management measures do not seek to remove or alter existing lighting infrastructure, but instead acknowledge lighting as an environmental constraint within which the habitat will operate.

4.4 Disturbance Pressure

Unmanaged access and frequent disturbance can significantly reduce the ecological value of roof-level habitats. To address this constraint:

- Access to the green roof will be restricted to essential maintenance only;
- No recreational or regular operational access is proposed; and
- Maintenance activities will be programmed to avoid unnecessary disturbance, particularly during the bird breeding season where practicable.

This low-disturbance approach is also critical to protecting the Peregrine Falcon perching feature recorded on the building.

4.5 Structural and Loading Constraints

The roof structure imposes limits on:

- Substrate depth
- Plant size and rooting depth
- Long-term tree growth potential

These constraints have informed the decision to exclude large trees and instead focus on low shrubs, grasses and herbaceous species, which collectively provide structural complexity without exceeding structural limits.

4.6 Climate Change Considerations

Projected climate change trends, including increased rainfall intensity and longer periods of summer drought, have been considered in the development of the management approach. Species selection and management practices have been designed to ensure that the green roof remains resilient under future climate conditions, reducing the need for intervention and supporting long-term biodiversity value.

5. Aims and Objectives of Management

5.1 Overall Aim

The overarching aim of this Biodiversity Enhancement and Management Plan (BEMP) is to secure the long-term delivery, maintenance and monitoring of biodiversity enhancements associated with the Huddersfield Student Scheme, ensuring that the development delivers and sustains the 11.01% on-site biodiversity net gain identified within the approved Biodiversity Impact Assessment.

This aim will be achieved through the effective establishment and ongoing management of the intensive green roof, which represents the principal biodiversity enhancement within a constrained urban setting.

5.2 Management Objectives

The specific management objectives of the BEMP are to:

1. Establish a structurally diverse intensive green roof habitat that supports grasses, herbaceous species and low shrubs appropriate to exposed roof-level conditions.
2. Achieve a minimum of 'moderate condition' for the intensive green roof habitat within three years of installation, in line with the assumptions used within the Defra Biodiversity Metric.
3. Maintain the green roof habitat in moderate or better condition for the lifetime of the development through appropriate management and monitoring.
4. Provide enhanced foraging opportunities for invertebrates, resulting in increased prey availability for higher trophic levels, including birds and bats.
5. Provide nesting, shelter and foraging habitat for urban-tolerant bird species, while ensuring that existing Peregrine Falcon perching behaviour is retained and protected from unnecessary disturbance.
6. Deliver a low-disturbance management regime, with roof access restricted to essential maintenance activities only.
7. Ensure habitat resilience to climate extremes, including wind exposure, frost, heavy rainfall and summer drought.

5.3 Relationship to Biodiversity Net Gain

The achievement of the above objectives is critical to the delivery of biodiversity net gain on the site. Failure to establish or maintain the green roof habitat in moderate condition would undermine the assumptions of the approved Biodiversity Impact Assessment.

This BEMP therefore provides the mechanism by which the biodiversity outcomes quantified within the metric are secured, monitored and maintained, ensuring that the reported 11.01% net gain remains valid in the long term.

5.4 Policy Compliance

The aims and objectives set out above align with:

- National Planning Policy Framework (NPPF) requirements to minimise impacts on biodiversity and deliver net gains;
- Local planning policy requiring a minimum biodiversity net gain; and
- The mitigation hierarchy of avoid, mitigate, compensate and enhance, as applied within the approved ecological reports.

6. Management Actions

6.1 Overview

Management actions set out in this section are designed to ensure the successful establishment, maturation and long-term maintenance of the intensive green roof in accordance with the aims and objectives of this BEMP. The actions reflect the exposed roof-level environment, structural constraints of the building and the biodiversity outcomes assumed within the approved Biodiversity Impact Assessment.

Management will be adaptive, proportionate and informed by monitoring results, with the primary objective of maintaining the habitat in moderate or better condition for the lifetime of the development.

6.2 Establishment Phase Management (Years 1–3)

The first three years following installation represent the critical establishment phase, during which management input will be highest.

6.2.1 Plant Establishment and Replacement

- Newly installed planting will be inspected regularly to assess establishment success.
- Any failed or poorly performing plants will be replaced on a like-for-like basis during the next appropriate planting season.
- Species composition will remain consistent with the approved planting mix to ensure delivery of the assumed biodiversity value.

6.2.2 Irrigation

- Temporary irrigation will be provided during prolonged dry periods to support establishment.
- Irrigation will be reduced progressively as vegetation becomes established and will not form part of long-term routine management.

6.2.3 Weed Control

- Non-desirable species, including invasive or dominant ruderal plants, will be selectively removed by hand where practicable.
- Herbicide use will be avoided unless necessary and, where required, will be applied in a targeted manner by a competent operative.

6.2.4 Substrate and Drainage Checks

- Substrate levels will be inspected for settlement or erosion, particularly following periods of heavy rainfall or high winds.
- Any exposed areas will be reinstated to prevent loss of growing medium and maintain habitat integrity.

6.3 Operational Phase Management (Years 4–30)

Once the green roof has reached moderate condition, management input will transition to a lower-intensity, maintenance-focused regime.

6.3.1 Vegetation Management

- Grasses and herbaceous species will be managed to prevent excessive dominance by any single species.
- Selective cutting or thinning may be undertaken where necessary to maintain structural diversity.
- Arisings will be removed to prevent nutrient enrichment of the substrate.

6.3.2 Shrub Management

- Low shrubs will be selectively pruned to maintain form and prevent excessive shading of surrounding vegetation.
- Pruning will be undertaken outside the bird breeding season where reasonably practicable.

6.3.3 Disturbance Control

- Access to the green roof will be restricted to essential maintenance only.
- No routine or recreational access will be permitted.
- Maintenance visits will be kept to the minimum frequency required to meet management objectives.

This approach also ensures continued protection of the Peregrine Falcon perching feature.

6.4 Protected Species Considerations During Management

- Management activities will be timed to avoid unnecessary disturbance to nesting birds wherever possible.
- Visual checks for nesting activity will be undertaken before any significant vegetation management during the breeding season.
- The green roof will be managed in a manner that maintains its value as a foraging habitat for bats, primarily through sustaining invertebrate-rich vegetation.

6.5 Adaptive Management

Management actions will be reviewed in response to monitoring results. Where monitoring identifies under-performance against the objectives set out in Section 5, management prescriptions will be adjusted accordingly, which may include:

- Increased frequency of inspections.
- Targeted replanting.
- Revised vegetation management techniques.

7. Annual Work Programme (Five-Year Rolling Programme / 30-Year Duration)

7.1 Overview

This section sets out an annual work programme for the management of the intensive green roof. The programme covers an initial five-year period and is designed to be rolled forward at five-year intervals for a minimum total duration of 30 years, in accordance with the requirements of the planning condition.

The programme reflects the changing management needs of the habitat over time, distinguishing between the establishment phase and the long-term operational phase.

7.2 Years 1–5: Establishment and Early Management Phase

Year 1

- Inspection of planting within the first growing season
- Irrigation during prolonged dry periods
- Replacement of failed planting during the next appropriate planting season
- Removal of undesirable or invasive species
- Inspection of substrate stability and drainage performance

Year 2

- Biannual inspections (spring and late summer)
- Targeted weed control
- Replacement of any failed planting
- Selective thinning where early dominance of species is identified

Year 3

- Biannual inspections
- Assessment of habitat condition against Defra Biodiversity Metric criteria
- Minor substrate top-up where settlement has occurred
- Reduction of irrigation to emergency-only provision

Year 4

- Transition to operational management regime
- Biannual inspections
- Selective vegetation management to maintain structural diversity

Year 5

- Biannual inspections
- Formal review of habitat condition and management performance
- Confirmation that the habitat has achieved moderate condition
- Review and update of the rolling five-year work programme

7.3 Years 6–30: Operational Management Phase

From Year 6 onwards, the green roof will be managed under a lower-intensity but consistent regime designed to maintain habitat condition.

Typical annual actions will include:

- Two scheduled inspections per year
- Selective vegetation management to prevent dominance
- Shrub pruning where required
- Monitoring of substrate condition and drainage
- Removal of arisings to prevent nutrient enrichment

The five-year rolling programme will be reviewed and updated at Years 10, 15, 20, 25 and 30.

7.4 Timing and Seasonal Considerations

Where reasonably practicable:

- Vegetation management will avoid the main bird breeding season (March–August).
- Works will be timed to minimise disturbance to wildlife and the Peregrine Falcon perching feature.

Emergency works (e.g. safety or structural issues) may be undertaken at any time if required.

7.5 Record Keeping

Records will be kept of:

- Inspection dates
- Management actions undertaken
- Planting replacement
- Any issues identified and remedial measures applied

These records will inform future reviews of the rolling work programme.

8. Management Body and Responsibilities

8.1 Management Responsibility

Responsibility for the implementation, management and monitoring of this Biodiversity Enhancement and Management Plan (BEMP) will rest with the site owner or an appointed building management company acting on their behalf.

The management body will ensure that all biodiversity measures set out within this BEMP are delivered in full and maintained for the minimum 30-year duration of the plan.

8.2 Appointment of Contractors

Day-to-day management and maintenance of the intensive green roof will be undertaken by a competent contractor with demonstrable experience in green roof installation and maintenance.

Where specialist ecological input is required (for example, condition assessment or advice on habitat performance), this will be provided by a suitably qualified ecologist.

8.3 Roles and Responsibilities

The management body will be responsible for:

- Ensuring the intensive green roof is installed in accordance with the approved plans and specifications;
- Implementing the management actions set out in Section 6;
- Delivering the annual work programme set out in Section 7;
- Retaining records of inspections, management actions and any remedial works;
- Ensuring access to the roof is restricted to essential maintenance only;
- Protecting the Peregrine Falcon perching feature from unnecessary disturbance; and
- Facilitating monitoring and review of the BEMP at the required intervals.

8.4 Handover and Continuity

In the event of a change in site ownership or management arrangements, responsibility for the BEMP will be formally transferred to the successor organisation. The requirements of this BEMP will be incorporated into any relevant site management or maintenance documentation to ensure continuity of delivery.

8.5 Compliance with Planning Condition

The management body acknowledges that the requirements of this BEMP form part of the approved planning condition. Failure to implement or maintain the measures set out herein may constitute a breach of planning control.

9.0 Monitoring, Success Criteria and Remedial Measures

9.1 Monitoring Programme

Monitoring will be undertaken to assess the condition, functionality and performance of the intensive green roof in relation to the aims and objectives of this Biodiversity Enhancement and Management Plan (BEMP).

Monitoring will be carried out:

- During the establishment phase (Years 1–3) to confirm successful establishment of planting; and
- During the operational phase (Years 4–30) to ensure that habitat condition is maintained.

Monitoring may be undertaken by a suitably qualified contractor, with ecological input sought where necessary to assess habitat condition.

9.2 Monitoring Frequency

- **Years 1–3:**
Monitoring inspections will be undertaken at least twice annually (spring and late summer).
- **Years 4–30:**
Monitoring inspections will be undertaken at least once annually, with additional inspections where issues are identified.

Monitoring will be coordinated with routine maintenance visits where possible to minimise disturbance.

9.3 Success Criteria

The success of the intensive green roof will be assessed against the following criteria:

- The habitat achieves and maintains moderate condition or better, as defined by the Defra Biodiversity Metric.
- Vegetation is well established across the majority of the roof area, with no extensive areas of persistent bare substrate (unless intentionally designed).
- A structurally diverse mix of grasses, herbaceous species and low shrubs is present.
- No single species becomes dominant to the detriment of overall habitat diversity.
- The roof continues to provide suitable foraging habitat for invertebrates, with indirect benefits for birds and bats.
- Management activities do not result in unnecessary disturbance to the Peregrine Falcon perching feature.

Achievement of these criteria underpins the continued validity of the 11.01% on-site biodiversity net gain reported within the approved Biodiversity Impact Assessment.

9.4 Remedial Measures

Where monitoring identifies that success criteria are not being met, appropriate remedial measures will be implemented. These may include:

- Replacement of failed or poorly performing plants;
- Targeted replanting to restore structural diversity;
- Adjustment of irrigation regimes during extended dry periods;
- Increased frequency of weed control;
- Minor substrate top-up where settlement or erosion has occurred.

Remedial measures will be proportionate to the issue identified and designed to restore the habitat to moderate condition as soon as practicable.

9.5 Adaptive Management

This BEMP adopts an adaptive management approach. Monitoring outcomes will inform future management actions, ensuring that the green roof continues to meet biodiversity objectives under changing environmental conditions, including climate change.

10. Review, Funding and Long-Term Security

10.1 Review and Update Mechanism

This Biodiversity Enhancement and Management Plan (BEMP) will be reviewed at five-year intervals following completion of the development, in accordance with the requirements of the planning condition.

Each review will consider:

- Monitoring results collected under Section 9;
- Whether the intensive green roof continues to meet the aims and objectives set out in Section 5; and
- Whether management actions remain appropriate given site conditions, habitat performance and environmental change.

Where necessary, the BEMP will be updated to reflect monitoring outcomes or revised management requirements, provided that any updates remain consistent with the original biodiversity objectives and do not reduce the level of biodiversity delivered on site.

10.2 Duration of Management

The measures set out within this BEMP will be implemented for a minimum period of 30 years following completion of the development.

This duration aligns with:

- The timescales assumed within the approved Biodiversity Impact Assessment (2023); and
- Best practice for securing long-term biodiversity net gain within urban developments.

10.3 Funding and Resourcing

Funding for the implementation, monitoring and ongoing management of the intensive green roof and associated biodiversity enhancements will be secured through the site owner or appointed building management company.

All costs associated with:

- Installation of the green roof;
- Establishment and long-term maintenance;
- Monitoring and remedial measures; and
- Periodic review of this BEMP

will be met as part of the building's operational and maintenance arrangements.

10.4 Long-Term Security and Enforcement

The requirements of this BEMP will be secured through a planning condition and integrated into the site's long-term management and maintenance documentation.

In the event of a change in ownership or management responsibility, the obligations of this BEMP will be transferred to the successor party to ensure continuity of delivery for the full 30-year period.

Failure to implement or maintain the measures set out within this BEMP may constitute a breach of planning control.

10.5 Conclusion

This Biodiversity Enhancement and Management Plan provides a clear, proportionate and deliverable framework for securing biodiversity enhancement at the Huddersfield Student Scheme.

When implemented in full, the BEMP will:

- Deliver and maintain the intensive green roof habitat;
- Protect existing ecological features, including the Peregrine Falcon perching location;
- Provide enhanced foraging and habitat opportunities for invertebrates, birds and bats; and
- Secure the 11.01% on-site biodiversity net gain identified within the approved Biodiversity Impact Assessment for the lifetime of the development.

Appendices

Figure 1. Recommended planting scheme and density

Species	Common Name	Status	Structural Layer	Revised Density (plants per m ²)	Ecological Function / Notes
<i>Festuca rubra</i>	Red Fescue	UK native	Grass	4–6	Wind tolerant, substrate stabilisation
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	UK native	Grass	2–3	Vertical structure, moisture tolerant
<i>Agrostis capillaris</i>	Common Bent	UK native	Grass	4–6	Fine matrix grass, drought tolerant
<i>Koeleria macrantha</i>	Crested Hair-grass	UK native	Grass	3–5	Short, robust grass for exposed sites
<i>Achillea millefolium</i>	Yarrow	UK native	Herbaceous perennial	3–4	Long flowering, drought tolerant
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	UK native	Herbaceous perennial	2–3	Nitrogen fixer, high pollinator value
<i>Leucanthemum vulgare</i>	Oxeye Daisy	UK native	Herbaceous perennial	2–3	Structural flowers, hardy
<i>Plantago lanceolata</i>	Ribwort Plantain	UK native	Herbaceous perennial	3–4	Invertebrate host plant
<i>Prunella vulgaris</i>	Selfheal	UK native	Herbaceous perennial	4–5	Low-growing, resilient
<i>Silene dioica</i>	Red Campion	UK native	Herbaceous perennial	2–3	Early nectar source
<i>Thymus polytrichus</i>	Wild Thyme	UK native	Sub-shrub	4–5	Aromatic ground cover, drought tolerant
<i>Calluna vulgaris</i>	Heather	UK native	Low shrub	2–3	Evergreen structure, late nectar
<i>Erica cinerea</i>	Bell Heather	UK native	Low shrub	2–3	Pollinator support
<i>Vaccinium myrtillus</i>	Bilberry	UK native	Low shrub	1–2	Low canopy, bird and insect value
<i>Sedum telephium</i>	Orpine	Non-native (beneficial)	Herbaceous perennial	4–5	Late-season nectar source
<i>Lavandula angustifolia</i>	Lavender	Non-native (beneficial)	Sub-shrub	2–3	High pollinator use
<i>Salvia nemorosa</i>	Balkan Sage	Non-native (beneficial)	Herbaceous perennial	2–3	Long flowering, drought tolerant
<i>Nepeta × faassenii</i>	Catmint	Non-native (beneficial)	Herbaceous perennial	3–4	Extended nectar season
<i>Geranium sanguineum</i>	Bloody Crane's-bill	Non-native (beneficial)	Herbaceous perennial	3–4	Hardy ground cover
<i>Santolina chamaecyparissus</i>	Cotton Lavender	Non-native (beneficial)	Sub-shrub	1–2	Wind tolerant, evergreen structure
<i>Helianthemum</i> spp.	Rock Rose	Non-native (beneficial)	Sub-shrub	2–3	Heat and drought tolerant

[illegible]