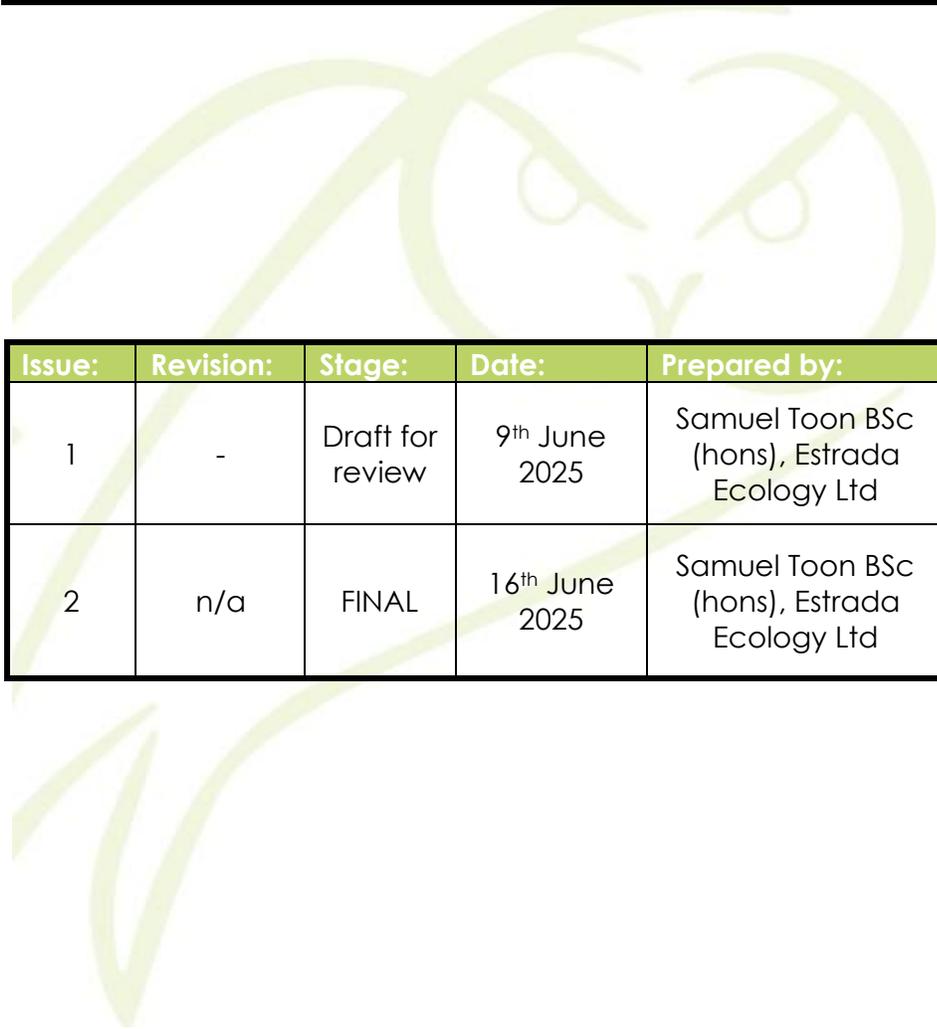


Habitat Management and Monitoring Plan	
For:	Casey Designs
Site:	Barnsley Trade Park, Wombwell Lane, Barnsley, S70 3NS
Report Date:	16 th June 2025
Report Reference	SQ-3350.A



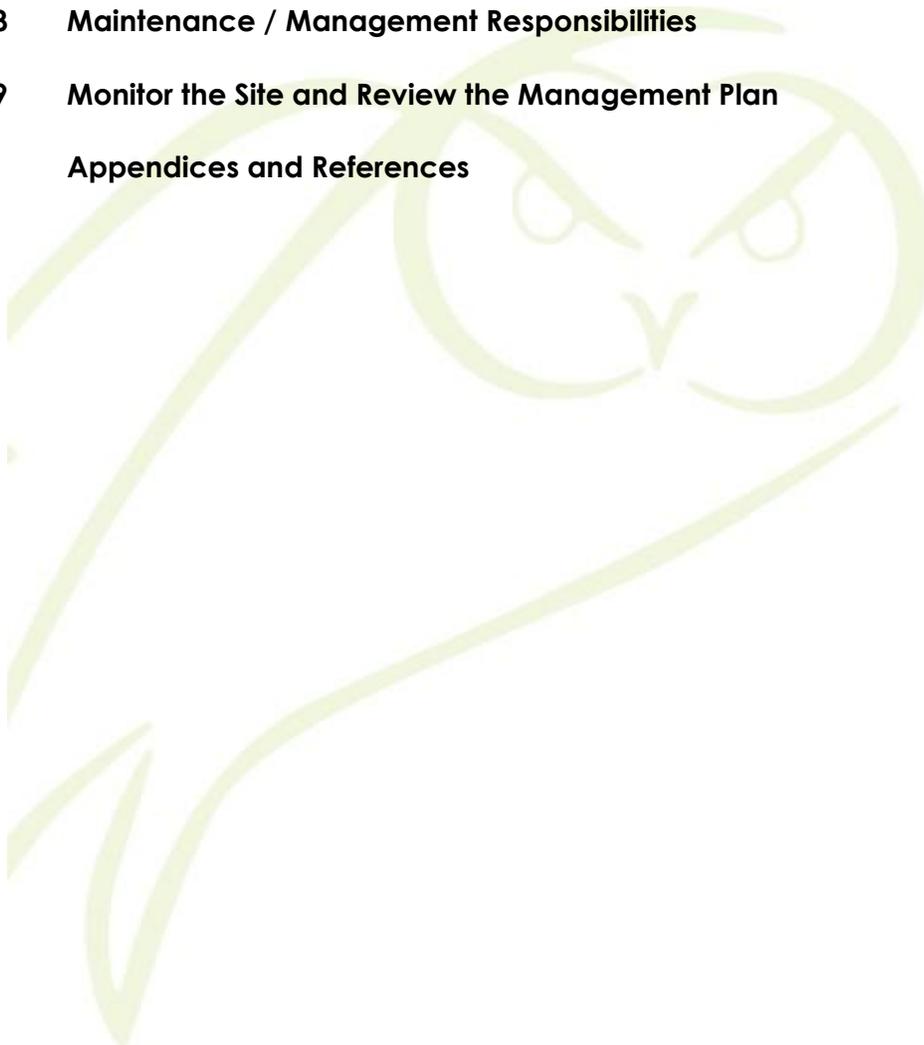
Client:	Casey Designs
Site Name:	Barnsley Trade Park, Wombwell Lane, Barnsley, S70 3NS
Grid Reference:	SE 37652 04862
Report:	Habitat Management and Monitoring Plan
Planning Authority:	Barnsley Metropolitan Borough Council
Planning reference:	2024/0594
Condition:	05



Issue:	Revision:	Stage:	Date:	Prepared by:	Approved by:
1	-	Draft for review	9 th June 2025	Samuel Toon BSc (hons), Estrada Ecology Ltd	Natasha Estrada MRes, MCIEEM, Estrada Ecology Ltd
2	n/a	FINAL	16 th June 2025	Samuel Toon BSc (hons), Estrada Ecology Ltd	Natasha Estrada MRes, MCIEEM, Estrada Ecology Ltd

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1 Introduction

1.1 Background

1.1.1 The following Management and Monitoring Plan has been prepared by Estrada Ecology Ltd. This document sets out the habitat creation and management approaches for the proposed development at Barnsley Trade Park, Wombwell Lane, Barnsley, S70 3NS.

1.1.2 This document has been produced in conjunction with the following reports, plans and consultation responses:

- BNG-Wombwell Lane. Estrada Ecology Ltd, report reference: SQ-2314, dated February 2025.
- Biodiversity Net Gain Plan. Estrada Ecology Ltd, report reference SQ-3350, latest revision 9th June 2025.

1.1.3 This document has been prepared to discharge planning condition number 05 of planning application number 2024/0594. This conditions state:

Condition 05:

The development shall not commence until a Habitat Management and Monitoring Plan (the HMMP) prepared in accordance with the approved Biodiversity Gain Plan has been submitted to and approved by the Local Planning Authority. The HMMP shall include:

- a) a non-technical summary.
- b) the roles and responsibilities of the people or organisation(s) delivering the [HMMP];
- c) 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;
- d) 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
- e) the monitoring methodology and frequency in respect of the created or enhanced habitat to be submitted to the local planning authority, and approved in writing by, the local planning authority.
- f) A timetable for implementation and completion of creation and enhancement works.
- g) Notice in writing shall be given to the Council within 10 working days of the implementation of the HMMP
- h) Notice in writing shall be given within 10 working days of the completion of the habitat creation and enhancement works as set out in the HMMP and a

completion report, evidencing the completed habitat enhancements, has been submitted to, and approved in writing by the Local Planning Authority.

i) Thereafter the created and/or enhanced habitat specified in the approved [HMMP] shall be managed and maintained in accordance with the approved [HMMP] for a period of 30 years following the completion of the development.

Reason: To ensure the development delivers a biodiversity net gain on site in accordance with Local Plan Policy BIO1 and Schedule 7A of the Town and Country Planning Act 1990.

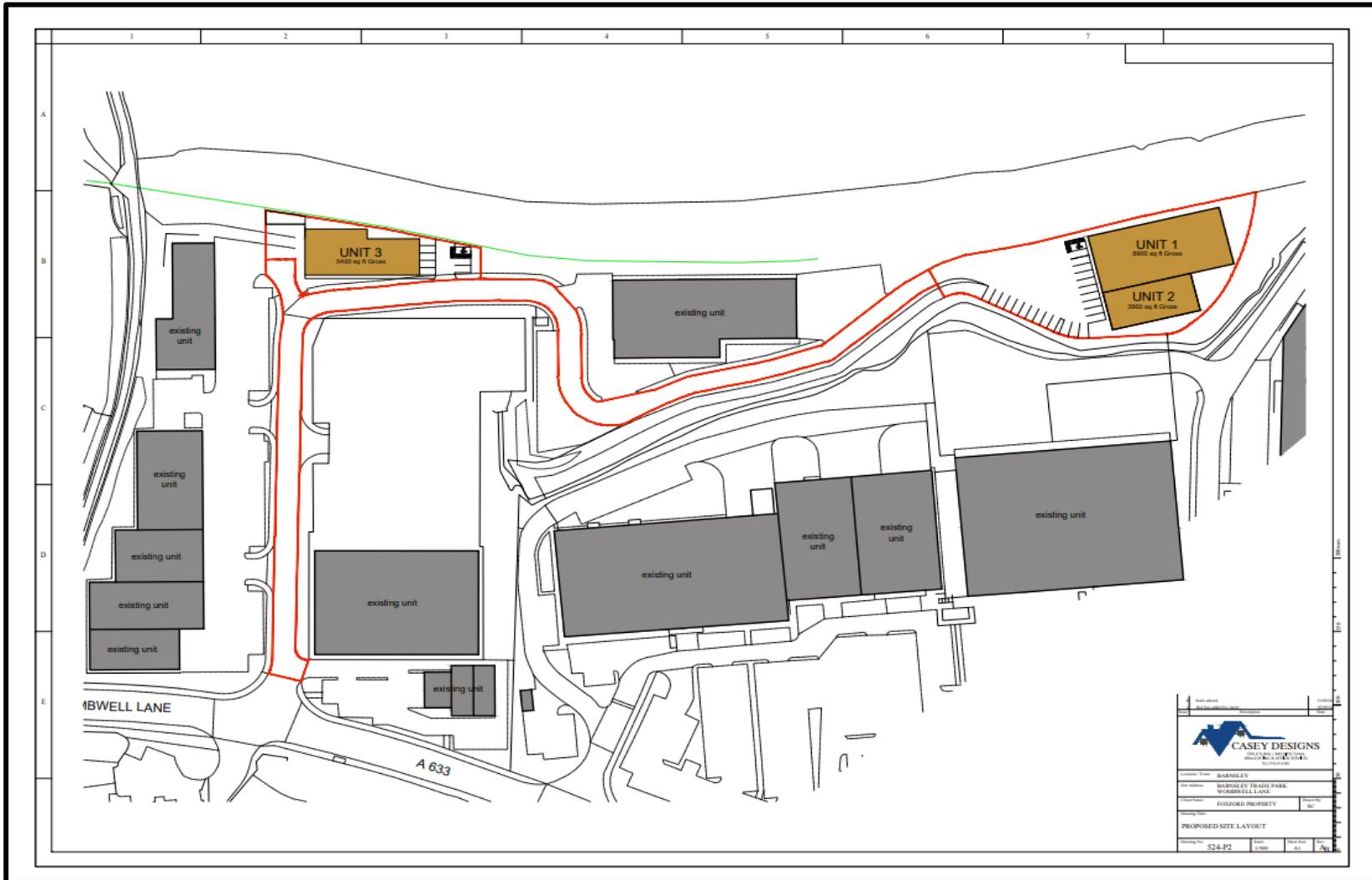
1.2 Site Location, Setting and Proposals

- 1.2.1 The application site is located within the administrative area of Barnsley Metropolitan Borough Council. The site is recorded to be approximately 1.2 km southeast of Barnsley Town centre. The survey site's central OS grid reference is recorded to be SE 37652 04862.
- 1.2.2 The site is approximately 0.43 hectares in size and primarily consists of developed land sealed surface and artificial unsealed unvegetated surface present within the site. Small areas of vegetated land are present, limited to mainly scattered ruderal vegetation, modified grassland, and bramble scrub habitats. A waterbody is present off site to the north, namely Dob Syke which is not under the applicant's ownership. It is determined that in line with the guidance, major encroachment is foreseen (within 0-4 meters of the bank).
- 1.2.3 The wider landscape is comprised of the urban fabric of Barnsley on the northern elevation, featuring residential developments including scattered trees and garden spaces. The south comprises of open vegetated land, determined to be mainly agricultural usage, with linear habitat present in the form of hedgerows and tree lines. Pockets of woodland are also present.
- 1.2.4 The application 2024/0594 pertains to the erection of 3 no. units for storage and distribution use (B8) and associated parking.

Figure 1: The Site Within the Wider Setting



Figure 2: Proposed Site Development Scheme (Casey Designs)



1.3 Legislation & Policy

- 1.3.1 The Environment Bill (2020) seeks to improve biodiversity through several means, including the introduction of a mandatory requirement for new developments to achieve a minimum of 10% biodiversity net gain, which will be managed as such for a minimum of 30 years after the development has been completed (Environment Bank, 2021). Key parts of the Environment Bill which relate to biodiversity net gain and its delivery are Part 6 Nature and Biodiversity and the supporting Schedule 14, particularly sections 9(3), 13(2), 14(2), and 15.
- 1.3.2 All relevant EU and UK nature conservation law will be adhered to in relation to the protection of ecological features and ecological enhancement. This includes the protection afforded to nesting birds under the Wildlife and Countryside Act 1981 (as amended).
- 1.3.3 Under the National Planning Policy Framework (2024), the presence of any protected species is a material planning consideration. The Framework states that impacts arising from development proposals must be avoided where possible, or mitigated / compensated for, and that opportunities for ecological enhancement should be sought.

2 Aims and Objectives

- 2.1 The aims of this Habitat Management and Monitoring Plan are as follows:
- 2.2 Maintain and enhance biodiversity value within the site:
- **Objective 1:** Protect and maintain retained habitats within the site.
 - **Objective 2:** Create new, ecological viable, and locally appropriate habitats suitable for native species.
- 2.3 Manage the site for biodiversity in the long-term.
- **Objective 3:** To ensure new and existing habitats establish and are suitably maintained to ensure long-term biodiversity gain (30 years).
- 2.4 Monitor the created habitats to ensure long-term success.
- **Objective 4:** Provide a framework of monitoring and outline review timeframes set for habitat condition targets.
 - **Objective 5:** Provide roles and responsibilities those responsible for addressing the maintenance responsibilities outlined in the HMMP.

3 Biodiversity Net Gain (BNG):

- 3.1 The site pre-development has been valued to have a total of 0.34 area habitat units and 2.49 watercourse units. To achieve the target 10% net gain and satisfy the Trading Summaries, the site post development would need to provide 0.37 area habitat units, and 2.73 watercourse habitat units, minimum.
- 3.2 The site post-development has been valued to have a total of 0.32 area habitat units (-6.48% net loss), and 2.49 watercourse habitat units (0.00% no net loss). As such, a further 0.06 habitat units and 0.25 watercourse units are required to balance the trading summary and achieve a 10% net gain for the site.
- 3.3 It is concluded that as the landscaping for the site has been developed in accordance with what is feasible, the outstanding units to achieve 10% are required to be offset.

Figure 3: BNG Metric Headline Results

FINAL RESULTS				
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	-0.02		
	<i>Hedgerow units</i>	0.00		
	<i>Watercourse units</i>	0.00		
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	-6.48%		
	<i>Hedgerow units</i>	0.00%		
	<i>Watercourse units</i>	0.00%		
Trading rules satisfied?		No - Check Trading Summaries ▲		
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
<i>Habitat units</i>	10.00%	0.34	0.37	0.06
<i>Hedgerow units</i>	10.00%	0.00	0.00	0.00
<i>Watercourse units</i>	10.00%	2.49	2.73	0.25

Table 1: Post-development Habitats and Units

Creation Habitats UKHABS	Target Condition	Units
Area Habitats		
Buildings	N/A	0.00
Developed Land, Sealed Surface	N/A	0.00
Artificial Unvegetated, Unsealed Surface	N/A	0.00
Individual Trees	Moderate	0.10
Mixed Scrub	Moderate	0.22

3.3 Details of this proposal's Biodiversity Net Gain Plan (Estrada Ecology Ltd, report reference SQ-2962, latest revision 19th February 2025).

4 Create New Ecological Viable and Locally Appropriate Habitats

4.1 No formal landscaping scheme has been created, with requirements for landscaping informed by the assessing ecologist in line with the requirements provided by the accompanying metric. The landscaping has been communicated back to the client and agreed to be incorporated within the scheme to reduce the loss of habitat units as much as feasible.

4.2 The habitat creation measures as outlined in the provided landscaping scheme have been designed to compensate for the loss of existing habitats within the site resulting from the development. The planting schedule, subject to appropriate management, will enhance the site for biodiversity in the long term.

4.3 The developer will be responsible for ensuring that the measures listed are incorporated into the development process to meet any planning conditions set by Barnsley Metropolitan Borough Council.

4.4 Management and monitoring regimes for the proposed new habitats are discussed in Section 7. The following outlines the specification and implementations of new plantings.

4.5 Tree Plantings

4.5.1 Seven small, scattered trees are proposed for the post-development scheme. All trees are assessed to have a target condition of moderate which will be

achieved provided that native trees are planted and suitable management is adhere to.

- 4.5.2 These trees are a requirement as part of the development schemes' biodiversity net gain assessment. As such, if any tree dies or is lost during the thirty-year management period, it must be replaced promptly like-for-like and at a size still be able to achieve the target size classification by the end of the management period.
- 4.5.3 The proposed trees are all assessed as being of a 'small' size within the BNG guidelines (defined as any tree with a breast height diameter of 75 - 300 mm after the thirty-year post-planting period). Specification of the planting size has been detail on the provided landscaping plan. Whips at around 1.2 to 2.5 m height and a stem diameter 10 to 40 mm are considered suitable to achieve a small size class without significant risk. Any tree predicted to not achieve a 'small' size class at thirty-years post-planting should be replaced with a tree of a size which is expected to.
- 4.5.4 The proposed new tree plantings should be ideally conducted between October and March, avoiding periods of inundation or prolonged ground frost. Bare root species planting should not be carried out in waterlogged or frozen ground to prevent the plants failing.
- 4.5.5 All new trees are recommended to be afforded some physical protection and support to reduce the risk of failed establishment. It is recommended that all trees are supported by stakes with adjustable rubber tree ties through establishment.

4.6 Mixed Scrub

- 4.6.1 Due to the proposed loss of bramble scrub within the site recorded within the baseline, further mixed scrub planting is deemed essential to balance the trading summary within the metric. This area of planting is a requirement as part of the development schemes' biodiversity net gain assessment. This area was assessed to have a target condition of Moderate: passing criteria A, C, and E.
- 4.6.2 This biodiversity area is comprised of a mix of native species including pussy willow, common dogwood, European hazel, and European spindle. It is confirmed following advice by the assessing ecologist, no schedule 9 species as listed by the wildlife and countryside act 1981 (as amended) have been proposed.
- 4.6.3 The soil should be prepared to be recompacted and well-draining. Any weeds or undesirable species should be removed during the establishment period. It is recommended that the planting of the scrub species is conducted during the dormant season (late autumn to early spring), avoiding the summer months

unless irrigation is guaranteed. Plants should be well-watered initially. Consider adding mulch around the ground away from the plant stems to better retain moisture and suppress weeds.

- 4.6.4 Species should be mixed with no one species dominating the composition. Avoid planting in too tight a cluster to allow for air circulation and future growth.

5 Timings for Creation of BNG Assets

- 5.1 The landscaping, comprising the planting of trees and scrub, should aim to be completed at or after the time of the completion of the proposed units. There should be no significant time between the completion of the main development of the site and the installation of the landscaping features, if feasible.
- 5.2 Once all the landscaping is completed and installed then the thirty-year management / monitoring period for these habitats will commence.

6 Manage the Site for Biodiversity in the Long-term

- 6.1 The following section outlines the works programme and management regime, outlining the specification and implementation over a thirty-year period.

Table 2: 30-Year Management and Maintenance Programme

Prescriptions	Years with Priority						
	1	2	3	5	6-10	11-20	21-30
New Tree Plantings – Target condition of Moderate							
New tree plantings to be supported with stakes and ties until established. All stakes and ties to be inspected and where required, replaced or adjusted. Tree supports and ties can be removed once trees have become established. If trees are yet to establish, stakes and ties should be adjusted to enable growth.	√	√	√	√			
New tree plantings should be watered in during establishment. In periods of prolonged drought additional watering should be undertaken to prevent the specimens from failing.	√	√	√	√			
Newly planted trees will be treated with mulch around stem to aid establishment and prevent growth of weeds. Mulch to be re-applied every spring for the first five growing seasons or until trees are suitably established.	√	√	√	√			
No regular pruning of the trees should occur in years 1 to 5 to allow establishment.	√	√	√	√			
Following establishment, all proposed trees can be managed as desired within reason. Given a target condition of poor, no specific management practices required. Any management should be conducted outside of the breeding bird seasons (April to September inclusive) if able.				√	√	√	√
Periodic inspections to check for pests, disease or damage should be conducted routinely outside the breeding bird season. Any defects should be addressed immediately, and any treatments required to rectify the issues applied.	√	√	√	√	√	√	√

Prescriptions	Years with Priority						
	1	2	3	5	6-10	11-20	21-30
Any trees lost should be removed immediately and disposed of accordingly. These must be replaced at the current expected girth in-line with the progress scheduled to achieve the target size by the completion of the thirty-year management period.							
New Mixed Scrub Planting – Target Condition of Moderate							
Water in plants during period of droughts or extended dry periods, especially during the establishment of the habitat.	√	√	√	√	√	√	√
For at least the first 2–3 growing seasons, clear competing vegetation around each plant to reduce stress and improve growth. This is recommended to be done manually.	√	√	√				
Monitor the habitat during the establishment period and replace any dead / failing species like-for-like as needed (preferably done in dormant season)	√	√	√				
Scrub habitat should not be subject to regular or habitual management such as pruning during the first 2–3 growing seasons to encourage a natural composition and structure.	√	√	√				
Periodic inspections to check for pests or disease should be conducted routinely outside the breeding bird season which is April to September inclusive. Any defects should be addressed immediately, and any treatments required to rectify the issues applied. Any deceased specimens should be removed immediately and disposed of accordingly.	√	√	√	√	√	√	√
Periodic inspections to check for any aggressively dominant species (such as bramble) are affecting or modifying the composition of the habitat.	√	√	√	√	√	√	√

Prescriptions	Years with Priority						
	1	2	3	5	6-10	11-20	21-30
To maintain rides and sheltered edges, any scrub vegetation which encroaches into the maintenance grass planted paths which extend through the habitat should be cut back. Grass paths within scrub area not to be regularly cut and should maintain a tall sward height.	√	√	√	√	√	√	√
Do not fertilize. Scrub habitats generally establish better on nutrient-poor soils; enrichment promotes weedy growth and undesirable species dominance.	√	√	√	√	√	√	√
General Site Measures							
Any habitat retained or created within the development boundary which is lost, destroyed, or otherwise degraded should be replaced / reinstated like-for-like in accordance with the proposed BNG post-development assessment.	√	√	√	√	√	√	√
An annual inspection for the presence of non-native invasive flora across the whole site should be undertaken and action taken should colonisation be recorded.	√	√	√	√	√	√	√
Litter should be removed from the site as part of the general day to day site management.	√	√	√	√	√	√	√
Monitoring							
Ecological BNG monitoring surveys undertaken by a suitably qualified ecologist and monitoring reports produced. Surveys and reports to be undertaken in years 1, 2, 5, 10, 20 and 30.	1	2	-	5	10	20	30
Relating to the above surveys, updates and amendments of method statement based on results of monitoring reports, where deemed applicable.	√	√	-	√	√	√	√

7.2 General Maintenance

- 7.2.1 Planting and maintenance of retained and newly created habitats are recommended to be undertaken by a competent landscape contractor such as a member of The British Association of Landscape Industries (BALI).
- 7.2.2 All plantings should be carried out following specifications outlined in this report or as provide by manufacturer's / provider's recommendations. The landscaping should strictly adhere to the accepted landscaping scheme relevant to the BNG report and managed in accordance with measures outlined herein to achieve target conditions.
- 7.2.3 Any works affecting protected species (if required), should be undertaken by a suitable qualified ecologist and said ecologist should be on call during the onset of site works to ensure any protected species issues that may arise are dealt with in a competent manner and act as an ecological clerk of works.
- 7.2.4 Pesticide and herbicide applications should be avoided where practical. Where the need outweighs the risk, applications should be applied by a suitably qualified contractor.
- 7.2.5 Newly created habitats should be managed to avoid impact and damage to aid their establishment.

8 Maintenance / Management Responsibilities

- 8.1 This HMMP has been produced by senior ecologist Samuel Toon of Estrada Ecology Ltd. Samuel is a suitably qualified ecologist with experience of UK Habitat classification surveys and biodiversity net gain surveys and calculations. Samuel has suitable experience producing and adapting HMMP documents.
- 8.2 The land manager will be responsible for the implementation of this HMMP, and the prescriptions included herein. The appointed land manager will also have the responsibility to enact the included prescriptions over the 30-year management plan, which may result in an adaptation to the HMMP. If the named land manager is required to change, this HMMP shall be updated to reflect this.
- 8.2 It is the responsibility of the appointed land manager to uphold the implemented management / maintenance programme as outlined within this report. Any third parties must be informed of the details of this management / maintenance programme as to fully comply with the details outlined in this report. Likewise, it is the applicant's responsibility to inform any construction / development companies involved in the development of the site such that they can inform their workers to comply with the outlined requirements for development-stage responsibilities regarding habitats and protected species.

- 8.3 The named land manager may choose to outsource the management / maintenance responsibility to suitably qualified landscapers (etc.). No such management organisation has been appointed at this stage. This HMMP should be amended to include reference to the acting management organisation(s) responsible for implementing the prescriptions outlined herein if other organisations are employed.
- 8.4 The LPA or Responsible Body for Reviewing HMMP is the Barnsley Metropolitan Borough Council. This LPA / organisation will be contactable within the 30-year management period regarding approval of any significant changes to this HMMP document.
- 8.5 The management and maintenance schedule outlined in this HMMP will last thirty-years and commence on the finalisation of the site development works and the proposed landscaping. This HMMP should be seen as a fluid document over its thirty-year period and subject to change dependent on the success or otherwise of the planting and management regime.

9 Monitor the Site and Review the Management Plan

- 9.1 The condition / state of the proposed habitats on site post-development will be monitored with scheduled site surveys conducted by a suitably qualified ecologist. These monitoring surveys aim to establish the success or otherwise of the scheme with respects of the relevant BNG assessments. The monitoring of the site should be undertaken in **years 1, 2, 5, 10, 20 and 30** following habitat creation and submitted to the Local Planning Authority in the appropriate format specified.
- 9.3 The reports should be based on a robust ecological assessment of the site and condition of the habitats and species using the Statutory Metric habitat condition assessments. Where problems with establishment and growth of habitats is identified, measures should be implemented to remediate any failure and the management strategy, and the management plan be adapted.
- 9.4 Results of the monitoring will inform the management strategy. The strategy should be seen as a fluid document over its thirty-year period and subject to change dependent on the success or otherwise of the planting and management regime.
- 9.5 Monitoring reports shall be submitted to the LPA on the 1st of November of each monitoring year after habitat creation. Any DEFRA Metric produced for this site after the habitat creation which is referenced within a monitoring report should be supplied along with the report. GIS files will also accompany each monitoring report. The data recorded shall be provided in standardised format to allow use of data in district-wide biodiversity network database, if applicable.

References and Bibliography

Estrada Ecology Ltd (2025). Biodiversity Net Gain Plan. report reference SQ-2314, latest revision February 2025.

Environment Bank (2015). Biodiversity Impact Calculator – Guidance for Use. Environment Bank.

All online references accessed June 2025

