Biodiversity Net Gain Assessment Report

Site Name	Location
New Hay Road	Ney Hay Road, Huddersfield, West Yorkshire, HD3 3FW
Job Ref	**Document Ref**
841	R3-841-03-EC-02
Site Code	**Grid Reference**
None	SE 06983 16382
Prepared	**Date of Survey**
Esme Sudall	16th September 2025

FINAL

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Document History

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1. Introduction

1.1 SCOPE AND PURPOSE

Root3 Associates was commissioned by Erron Lloyd to prepare a Biodiversity Net Gain (BNG) Assessment for the proposed works at 1000 New Hay Lane. This report has been prepared to inform a planning application for the erection of new farm building. The author of this report is Esme Sudall BSc (hons) MSc, an ecologist at Root3[1].

1.2 LOCATION

1.2.1 Please refer to Figure 1 for the site location. This site is located in Huddersfield (Grid reference: SE 06983 16382).

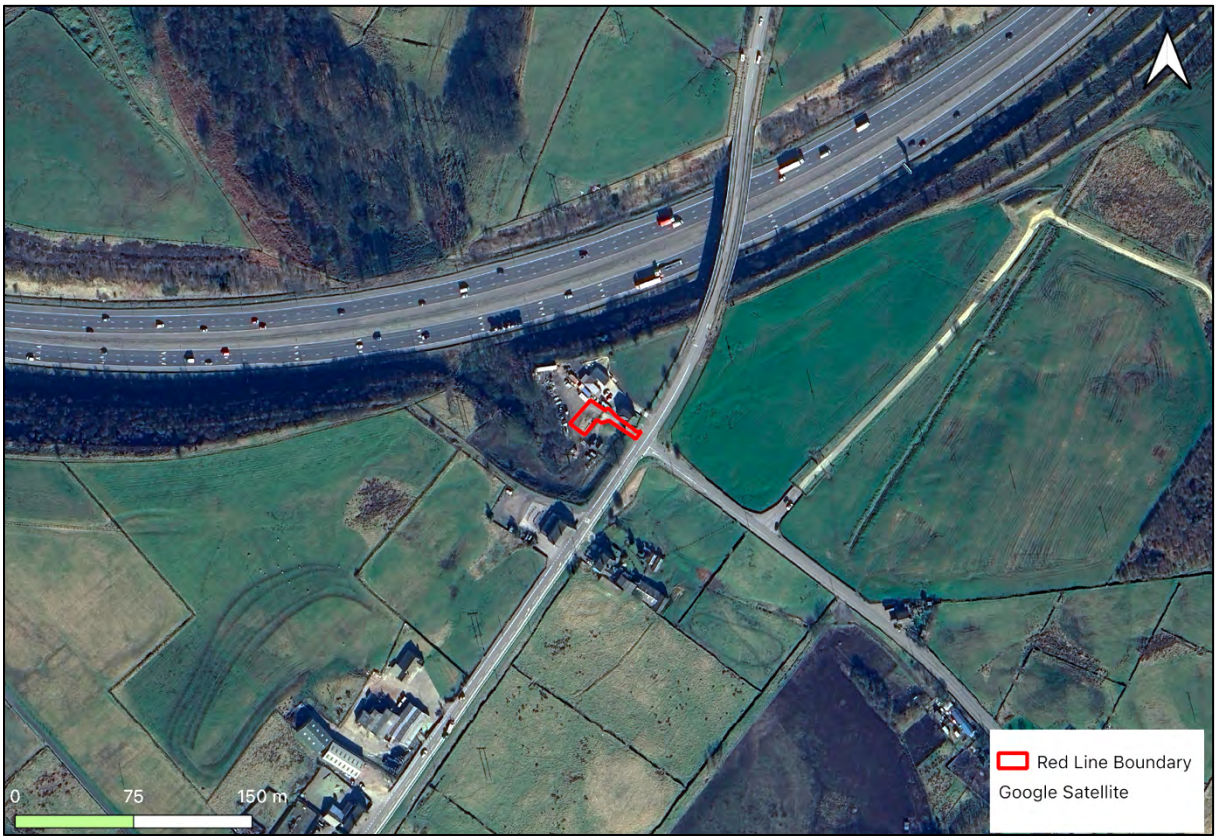


Figure 1: Site Location.

[1] Esme BSc (hons) MSc, post graduate qualified in ecology, experience conducting PEA, Species surveys, habitat assessments, and BNG Metric calculations.

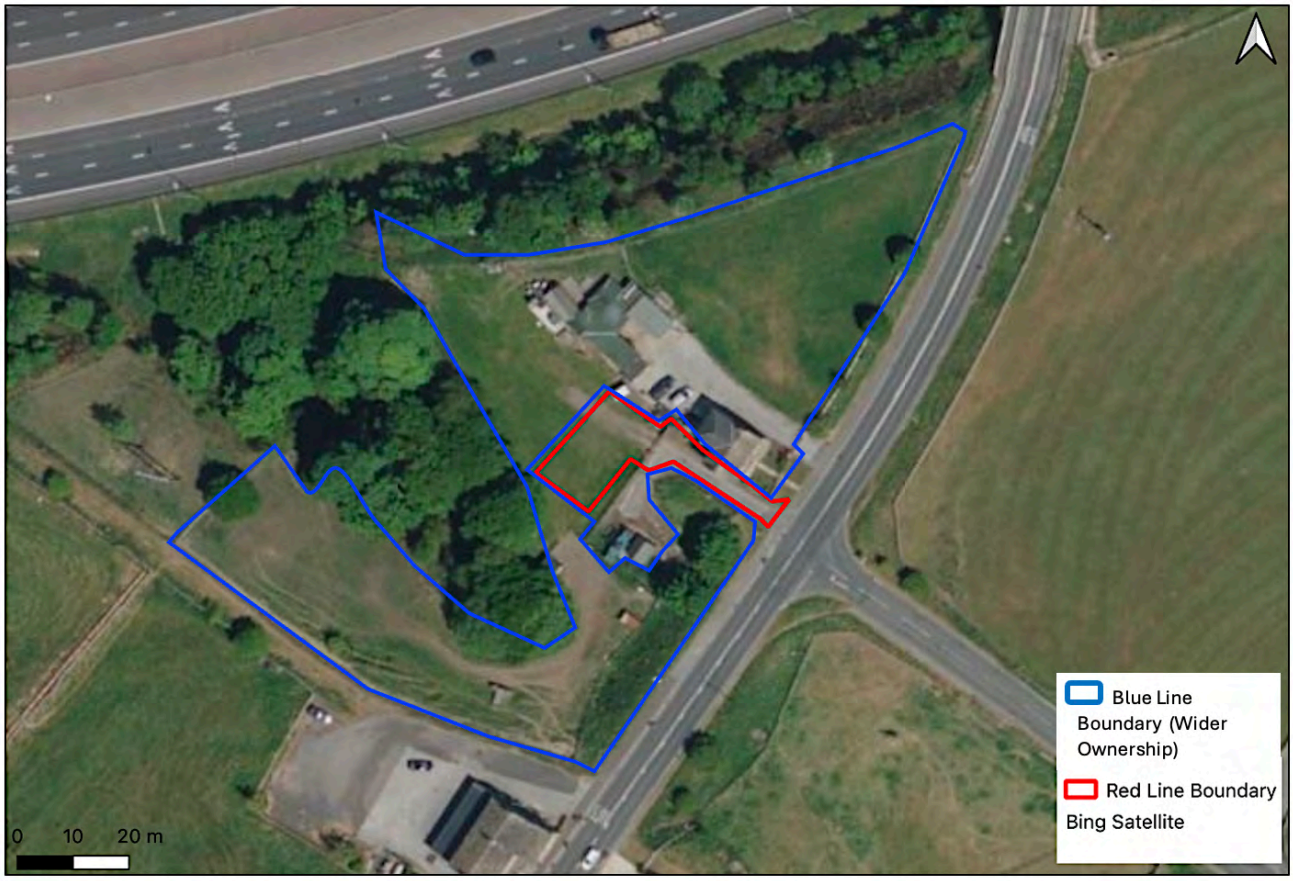


Figure 2: Site and property overview.

1.3 OBJECTIVES

1.3.1 The report has been produced to document the methods, results and conclusions of a BNG Assessment undertaken based on the proposed development for the site to fulfil the following:

- Ensure the mitigation hierarchy has been applied;
- Identify the baseline habitats present and provide condition assessments;
- Identify the post development habitats on site, assess the possible target condition and provide an indication of the likely importance of those habitats;
- Calculate the overall change in biodiversity score from pre-post development;
- Provide design recommendations to maximise potential net gain achievable;
- Provide an indication of the likely outcomes and indicative cost as required.

1.4 PLANNING CONTEXT

1.4.1 The Government 25-year Environment Plan states that the government will "embed environmental net gain principle for development".

1.4.2 National policy already sets out that planning should provide Biodiversity Net Gain (BNG) where possible. National Planning Policy Framework (NPPF) Paragraphs 174(d), 179(b) and 180(d) refer to this policy requirement and the Natural Environment Planning Practice Guidance (PPG) provides further explanation on how this should be done.

1.4.3 Under the Environment Act 2021, all planning permissions granted in England (with a few exemptions) except for small sites will have to deliver at least 10% biodiversity net gain from February 2024. BNG will be required for small sites from April 2024. BNG will be measured using Defra's biodiversity metric and habitats will need to be secured for at least 30 years. Key points regarding BNG are listed below:

- Minimum 10% gain required calculated using Biodiversity Metric and approval of net gain plan.
- Habitat secured for at least 30 years via obligations/ conservation covenant.
- Habitat can be delivered on site, off site or via statutory biodiversity units.
- There will be a national register for net gain delivery sites.
- The mitigation hierarchy still applies of avoidance, mitigation, and compensation for biodiversity loss.
- Will also apply to Nationally Significant Infrastructure Projects (NSIPs).
- Does not apply to marine development.
- Does not change existing legal environmental and wildlife protections.

1.4.4 Developers will be required to undertake an assessment (using the nationally set BNG metric tool) of the current biodiversity value of the site both prior to and post the development proposal. In the event that the value of the site post-development is less than 10% better than it was prior to development then the developer will have an obligation to provide additional off-site BNG units to achieve the mandatory 10% net gain.

Biodiversity Mitigation Hierarchy (CIEEM, 2021)

Action in order of priority		
1	Avoid	Retain and protect existing habitats.
2	Minimise	Redesign to reduce habitat loss.
3	Restore	Improvement of on-site habitats.
4	Offset / Compensate	Creation of habitats of similar type where it was not previously present or enhance existing habitats elsewhere.
5	Additional Actions	Use to achieve the targeted level of gain.

2 Methodology

2.1 EXISTING HABITAT (BASELINE)

2.1.1 A walkover survey of the site was undertaken by Root3 in September 2025. The methods were based on the standard methodology as detailed by the UK HAB Methodology. A UK HAB Plan has been provided in the appendix of this report.

2.2 PLANNING LAYOUT

2.2.1 The location Plan created by Thomas Donhaghey, provided a red line boundary as well as the habitats to be incorporated within the site.

2.3 STATUTORY BIODIVERSITY METRIC

2.3.1 The BNG calculation was undertaken utilising The Statutory Biodiversity Metric from DEFRA, the site's UK Habitat map and the Site Plan. The calculation was performed by a technically competent and suitably experienced ecologist as detailed in the British Standard BS8683.

2.3.2 The Statutory Biodiversity Metric uses habitat features as a proxy measure for capturing the importance and value of nature. The metric considers the size, ecological condition, location and proximity to nearby connecting features. The metric enables assessments to be made of the present and forecast future biodiversity value of the site.

2.4 HABITAT SCORING

2.4.1 The Statutory Biodiversity Metric supplies reference documents and user guides in which to accurately evaluate and assess the different habitats on site. The methodology for the baseline and post development calculations are demonstrated in the following sections.

Baseline Units

2.4.2 To assess the quality of a habitat and therefore calculate the units scored the Statutory Biodiversity Metric utilises three scoring factors as detailed below.

Condition

2.4.3 The condition of a habitat is assessed utilising the Condition Sheets provided for each habitat type. These list positive indicators of each habitat and indicate how many of these indicators need to be present to meet certain thresholds of condition. These condition sheets can be found in The Statutory Biodiversity Metric habitat condition assessment sheet with instructions tool Technical (Natural England Joint Publication, 2023).

Distinctiveness

2.4.4 The distinctiveness of each habitat (area and linear) is automatically assigned by the tool, based upon national records of the occurrence and rarity of each habitat (The Statutory Biodiversity Metric).

Strategic Significance

2.4.5 The idea of strategic significance works at a landscape scale. It gives additional unit value to habitats that are in preferred locations for biodiversity and other environmental objectives. Strategic significance utilises published local plans and objectives to identify local priorities for targeting biodiversity and nature improvement, such as Nature Recovery Areas and Local Biodiversity Plans.

Post Development Units

2.4.6 Additional factors are implemented when assessing post development habitats.

- Difficulty of creation/enhancement
- Temporal Risk "Time to target condition"

- Spatial Risk (when off-site mitigation is necessary)

2.5 LIMITATION OF ASSESSMENT

2.5.1 Whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment. The conclusions and recommendations detailed in this report are based upon the site redline boundary and the development proposals as outlined by the client at the time of writing. Should there be any changes to the site redline boundary or development proposals at a later stage, this assessment should be reviewed to determine whether any amendments or additional survey work is required.

2.5.2 Habitat areas, both pre-and-post development have been using online mapping and therefore will not be completely accurate.

3 Baseline Conditions – Habitats

3.1 STRATEGIC SIGNIFICANCE

3.1.1 The site is located in the West Yorkshire Local Nature Recovery Strategy (LNRS).

3.1.2 None of the habitats present at baseline are formally identified within this LNRS.

3.2 ON-SITE HABITAT BASELINE

3.2.1 Table 1 summarises the baseline habitats and area size. Please refer to Appendix D for the Condition Assessment Sheets for each habitat if applicable.

Table 1: Habitat Type and Condition Assessment (pre-development)

Existing area habitats			Distinctiveness		Condition	
Broad Habitat	Habitat Type	Area (hectares)	Distinctiveness	Score	Condition	Score
Urban	Developed land; sealed surface	0.0104	V.Low	0	N/A – Other	0
Grassland	Modified grassland	0.0062	Low	2	Poor	1
Urban	Artificial unvegetated; unsealed surface	0.0166	V.Low	0	N/A - Other	0

3.3 OFF-SITE HABITAT BASELINE

3.3.1 Table 2 summarises the baseline habitats and area size for the off-site land. This land is within the blue-line boundary and within the ownership of the client.

Table 2: Habitat Type and Condition Assessment (pre-development)

Existing area habitats		Distinctiveness		Condition	
Habitat Type	Area (hectares)	Distinctiveness	Score	Condition	Score
Modified grassland	0.008	Low	2	Poor	1

3.3.2 The Spatial risk category for this off-site habitat has been assigned as, *'Compensation inside LPA boundary or NCA of impact site'*.

3.4 RETAINED AND ENHANCED HABITATS

3.5 An area of artificial unvegetated; unsealed surface is to be retained within the proposed development. This area is to be graded to form level access to all units. As the condition assessment for this habitat is *'N/A – Other'*, this area has been classed as retained.

3.6 A field in the western portion of the blue line boundary is being used for habitat enhancement, in order to achieve biodiversity net gain.

3.7 LOST HABITATS

3.7.1 All other habitats within the red line boundary are to be lost to development.

3.8 PRE-DEVELOPMENT HABITAT BASELINE (ON-SITE)

3.8.1 Please refer to Table 3 summarising the Habitat Baseline for the calculation, demonstrating habitats to be retained, enhanced and/or lost.

Table 3: Habitat Baseline (On-Site)

	On-site Baseline	Retained	Enhanced	Lost
Habitats (Area) Units	0.01	0.00	0.00	0.01

3.9 PRE-DEVELOPMENT HABITAT BASELINE (OFF-SITE)

3.9.1 Please refer to Table 4 summarising the Habitat Baseline off the off-site land to be used for offsetting.

Table 4: Habitat Baseline (Off-Site)

	On-site Baseline	Retained	Enhanced	Lost
Habitats (Area) Units	0.02	0.00	0.00	0.02

3.10 HEDGEROWS PRE-DEVELOPMENT

3.10.1 There are no hedgerows present within the red line boundary.

4 Habitat Creation (On-Site)

4.1 AREA HABITATS

4.1.1 Please refer to Table 5 summarising habitat creation within the red line application boundary.

Table 5: Habitat Creation (Area) – On-Site

Proposed Habitat	Area (hectares)	Distinctiveness		Condition		
		Distinctiveness	Score	Condition	Score	Habitat units delivered
Developed land; sealed surface	0.0122	V.Low	0	N/A - Other	0	0.00

4.2 LINEAR HABITATS

4.2.1 No linear habitats are to be created within the proposed development.

5 Habitat Creation (Off-Site)

5.1 Please refer to Table 6 summarising habitat creation within the wider blue line boundary for the purposes of unit offsetting.

Table 6: Habitat Creation (Area) – Off-Site

Proposed Habitat	Area (hectares)	Distinctiveness		Condition		
		Distinctiveness	Score	Targeted Condition	Score	Habitat units delivered
Modified grassland	0.008	Low	2	Moderate	2	0.03

5.2 The client will enhance the condition of the off-site (within blue-line boundary) modified grassland parcel through targeted intervention and management, in accordance with manufacturers instructions. Works will include scarifying the existing sward and reseeding using an appropriate wildflower seed mix (e.g., Emorsgate EM2 General Purpose Meadow Mix[2]).

5.3 This area was selected for habitat creation as it comprises an embankment that is less wet than other parts of the site and experiences lower levels of disturbance and foot traffic compared with other areas within the blue line boundary.

5.4 The selected seed mix will contain a minimum of eight native vascular plant species, ensuring compliance with Criterion A of the BNG condition assessment for modified grassland habitats. Following establishment, the parcel will support at least six to eight vascular plant species per m^2, including a minimum of two forbs, thereby achieving moderate condition.

5.5 On-going management will focus on low-intensity maintenance to maintain floristic diversity and habitat structure over time.

[2] https://wildseed.co.uk/product/mixtures/complete-mixtures/general-purpose-meadow-mixtures/standard-general-purpose-meadow-mixture/

6 Summary

6.1 This report and the DEFRA Statutory Biodiversity Metric submitted have demonstrated that the proposed habitat creation creates a positive net gain of 12.50% habitat units. Trading rules have been satisfied.

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	0.00
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	12.50%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

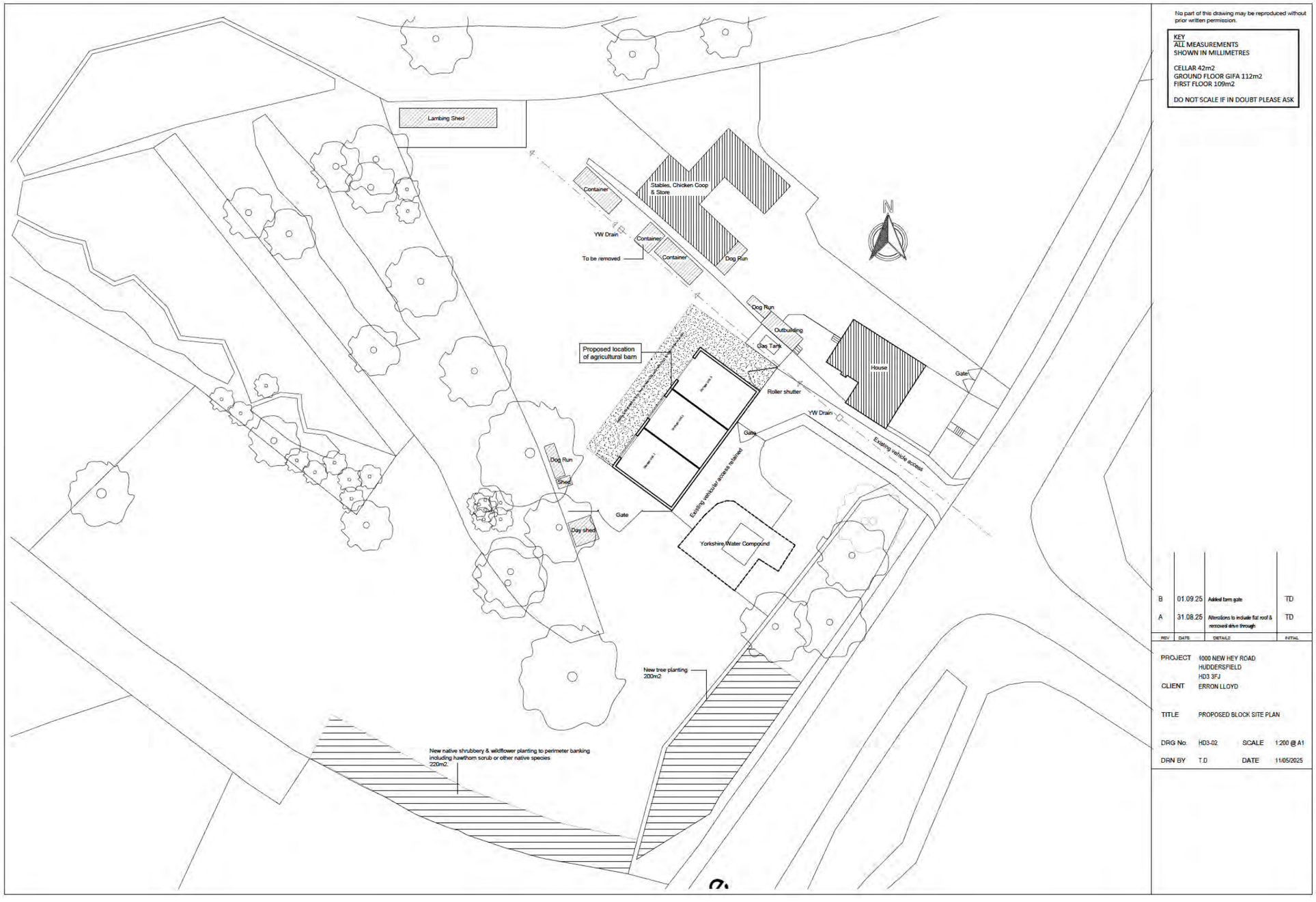
6.2 It is recommended that a 30-year Habitat Management Monitoring Plan (HMMP) be conditioned as part of the planning permission to meeting the targeted conditions to post-development habitats. The HMMP will detail full management prescriptions for the full 30-year period required as best practice for biodiversity net gain.

7 BIBLIOGRAPHY

1. CIEEM, 2021. Biodiversity Net Gain. Good Practice Principles for Development. Practical Guide.
2. CIEEM (2021) Biodiversity Net Gain Report and Audit Templates.
3. DEFRA (2023) The Statutory Biodiversity Metric: Auditing and Accounting for Biodiversity.
4. DEFRA (2023) The Statutory Biodiversity Metric: Auditing and Accounting for Biodiversity. Condition Assessment Sheets (Excel Format).
5. Greater Manchester Local Nature Recovery Strategy. Nature For All. Draft Consultation. https://greatermanchester-ca.gov.uk/media/hmsj013u/gm-local-nature-recovery-strategy-consultation-draft.pdf
6. Location Plan: 2025-91413_+Location+Plan_1090364.
7. Proposed Plan. Document ref: HD3-02 Proposed Block Site Plan Rev B
8. West Yorkshire Combined Authority. A Local Nature Recovery Strategy for West Yorkshire. *Draft.* [Online]. https://ehq-production-europe.s3.eu-west-1.amazonaws.com/e5154689692a393ad2623bd76e65da509f88709d/original/1758187035/a871f11625cebbe17fa137cd524ca05f_WY%20LNRS%20draft%20strategy.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIA4KKNQAKIJHZMYNPA%2F20251007%2Feu-west-1%2Fs3%2Faws4_request&X-Amz-Date=20251007T110239Z&X-Amz-Expires=300&X-Amz-SignedHeaders=host&X-Amz-Signature=9d8f334105e77a924edc8e613e48dc593340b82f93a7240c371909fc23b6be1d

Appendices

Appendix A: Proposed Plan. Document ref: HD3-02 Proposed Block Site Plan Rev B



Appendix B: UkHabs Plan of Baseline Habitats – On-site.



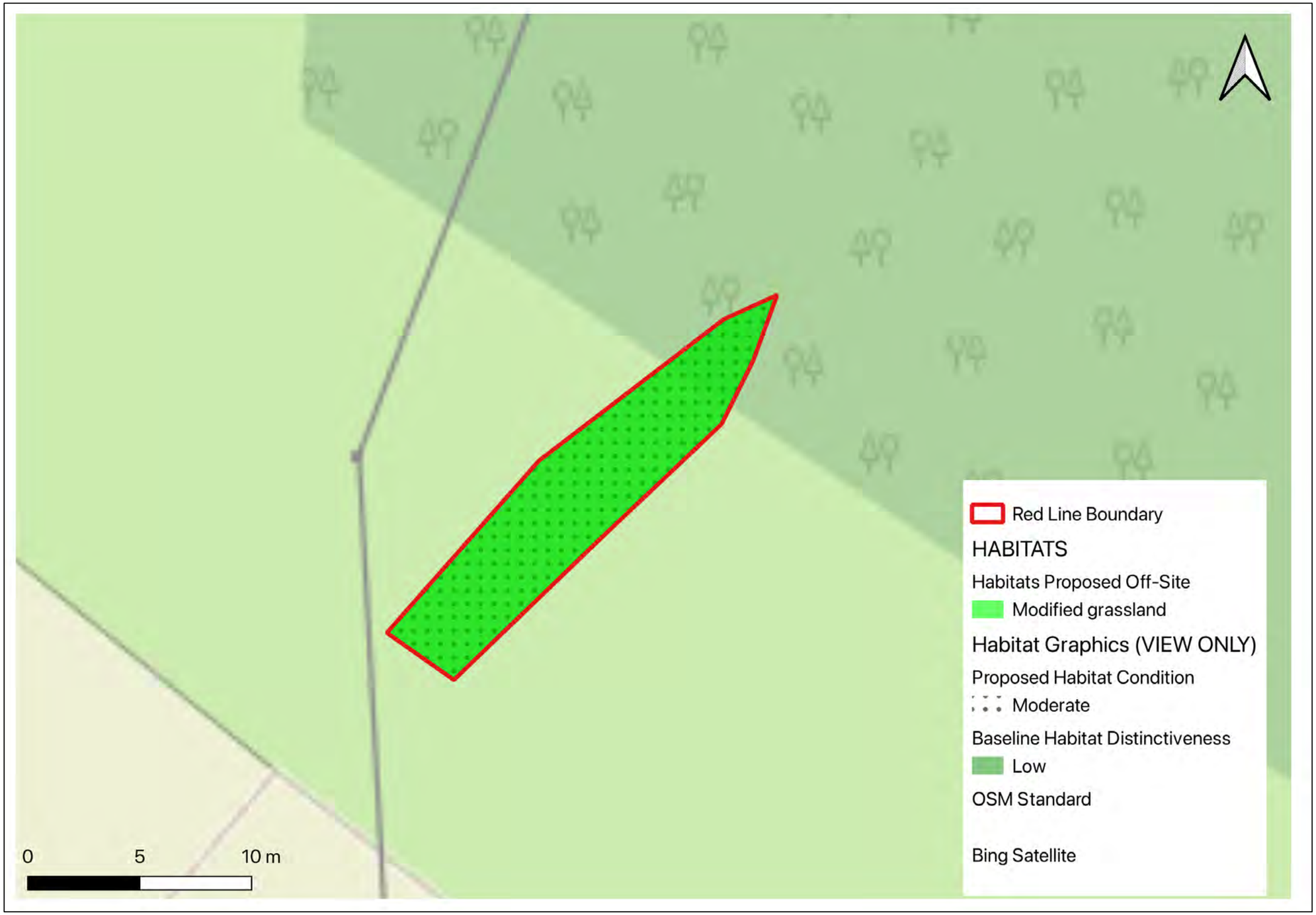
Appendix C: UkHabs Plan of Baseline habitats – Off-site.



Appendix D: UkHabs Plan of Post-Development Habitats – On-Site.



Appendix E: UkHabs Plan of Post-Development Habitats – Off-Site.



Appendix F: Baseline Condition Assessments.

UK Habitat Classification (UKHab) Habitat Type			
Grassland - Modified grassland			
On-site or off-site, site name and location	On site. New Hay Road. 1000 New Hay Road, Huddersfield, HD3 3FW	**Survey date and Surveyor name**	16/09/2025 Esme Sudall
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	
Grid reference	SE 06983 16382	**Habitat parcel reference**	
Habitat Description			
ukhab – UK Habitat Classification			

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	There are 6-8 vascular plant species per m^2 present, including at least 2 forbs (these may include those listed in Footnote 1). **Note - this criterion is essential for achieving Moderate or Good condition.** Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m^2 (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	No	Fewer than 6 species recorded in each quadrat. Species recorded included: dandelion *Taraxacum officinale*, creeping thistle *Cirsium arvense*, clover *Trifolium spp.*, perennial ryegrass *Lolium perenne*, common nettle *Urtica dioica*, rough meadow grass *Poa trivialis* and broadleaved dock *Rumex obtusifolius*.
B	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 vertebrates and invertebrates to live and breed.	No	Majority of sward flattened due to disturbance.

C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes	No scrub recorded.
D	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.	No	Evidence of machinery use/storage causing flattening.
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2].	Yes	Little bare ground recorded.
F	Cover of bracken *Pteridium aquilinum* is less than 20%.	Yes	No bracken recorded.
G	There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]).	Yes	No INNS recorded.
		Essential criterion achieved (Yes or No)	No
		Number of criteria passed	3

Condition Assessment Result (out of 7 criteria)	**Condition Assessment Score**	**Score Achieved ×/✓**
Passes 6 or 7 criteria including passing essential criterion A	Good (3)	
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria	Poor (1)	Poor

(excluding criterion A)			

Suggested enhancement interventions to improve condition score

Footnotes

Footnote 1 – Creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, curled dock *Rumex crispus*, broad-leaved dock *Rumex obtusifolius*, common nettle *Urtica dioica*, creeping buttercup *Ranunculus repens*, greater plantain *Plantago major*, white clover *Trifolium repens* and cow parsley *Anthriscus sylvestris*.

Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.

Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.

Footnote 4 – Wildlife and Countryside Act 1981 (as amended).