Biodiversity Net Gain Plan Report	
For:	Yorkshire Land
Site:	Land off Millstones, Oxspring, Sheffield, S36 8WZ
Report Date:	6th of June 2025
Report Reference:	SQ-3269b

Surveying Ecologist:

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Client:	Yorkshire Land
Site Name:	Land off Millstones, Oxspring, Sheffield, S36 8WZ
Grid Reference:	SE 27039 02187
Report:	Biodiversity Net Gain Plan Report
Date of Survey:	13th of May 2025
Lead Ecologist:	John Davies BSc (Hons) *Natural England GCN Licence: 2024-12094-CL08-GCN*

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1	V1	Final	2nd of June 2025	John Davies BSc (Hons) – Estrada Ecology Ltd	Natasha Estrada MRes, MCIEEM- Estrada Ecology Ltd
2	V2	Amendment	6th of June 2025	John Davies BSc (Hons) – Estrada Ecology Ltd	Natasha Estrada MRes, MCIEEM- Estrada Ecology Ltd

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Contents:

Whilst every effort has been taken to ensure the accuracy of this report and its contents in view of potential ecological constraints to development or the likely presence or absence of species it must only be viewed as a snapshot in time and not be viewed as definitive. Due to external factors, such as seasonality, weather etc having the potential to affect survey results, no liability can be assumed for omissions or changes that may or may not occur after the date this report was produced.

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1 Executive Summary

1.1 The following indicative BNG assessment is based dependant on the wider site adjacent to the development area being available for use as an offsetting location, subject to necessary permissions.

1.2 For the current development scheme for the site, an indicative net gain of 36.31% for area habitat units is calculated and a net gain for linear habitat units is calculated. No net gain for watercourse units is calculated. Furthermore, the Trading Summaries are satisfied by the proposed development scheme.

2 Introduction

2.1 In line with National Policy, developments (with some exceptions) are expected to achieve a minimum of 10% net gain in site biodiversity value.

2.2 Biodiversity metric calculations were requested by the client to determine the extent of net loss, no net loss, or net gain for proposed development plan for the site.

2.3 Biodiversity metric calculations were therefore undertaken for baseline and post-development habitats for the development site, using the Statutory Biodiversity Metric Calculation Tool developed by DEFRA. This assessment evaluates the impact of current development proposals on existing biodiversity value within the development site.

3 Baseline and Post Development Scheme Designs

3.1 Figure 1 presents the UK HABS habitat classification map for the development site and the wider site as identified via ground survey conducted in May 2025.

3.2 Figure 2 presents the UK HABS habitat classification map for the current development scheme design for the site post-development.

3.3 Figure 3 presents a summary of Statutory Metric results for the current development proposal.

3.4 Appendix One presents the current proposed development schemes used within the Metric calculations.

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Figure 1: UK HABS Baseline Habitat Classification Map for the Development Site and Offsetting (Mitigation) Site

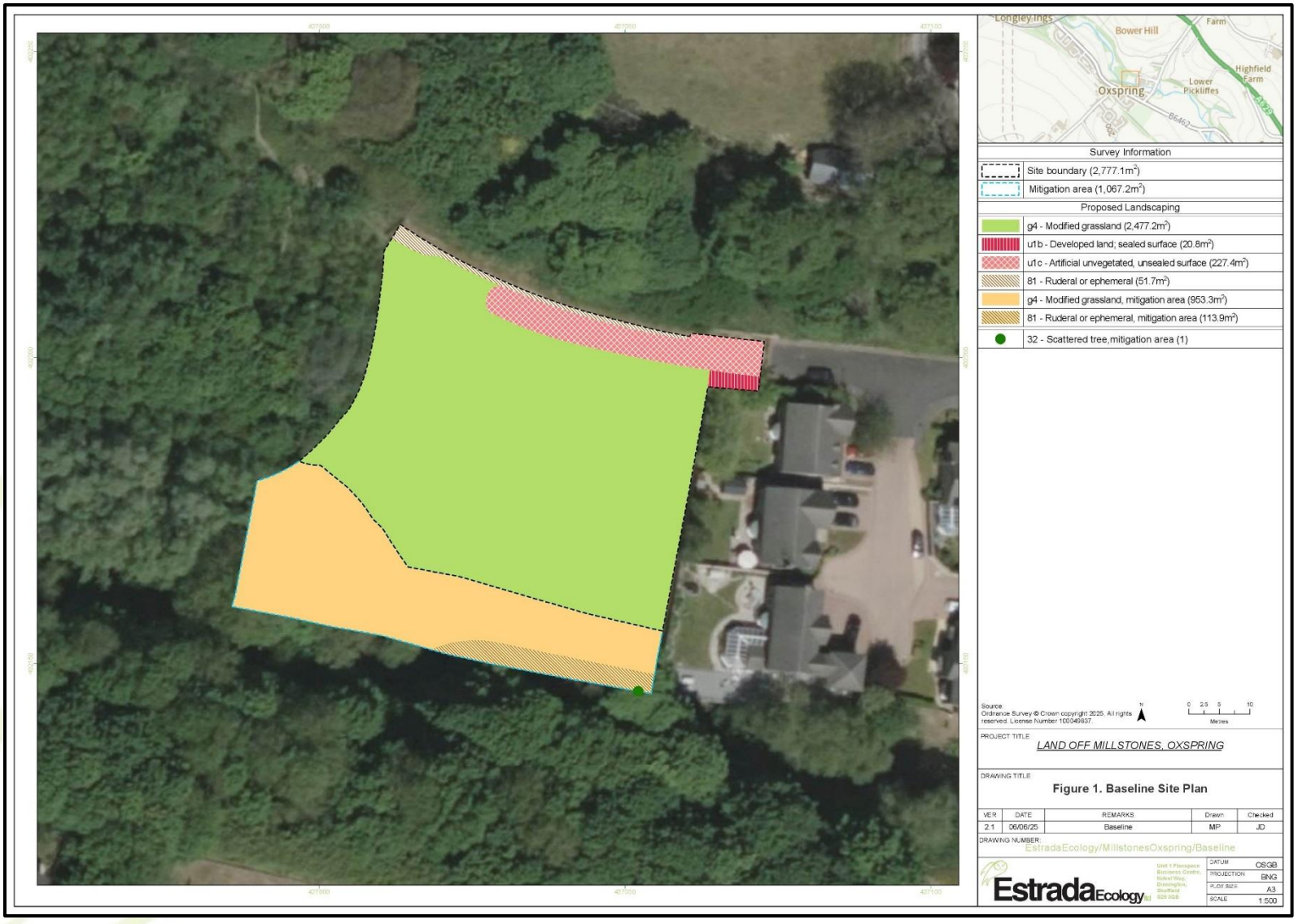
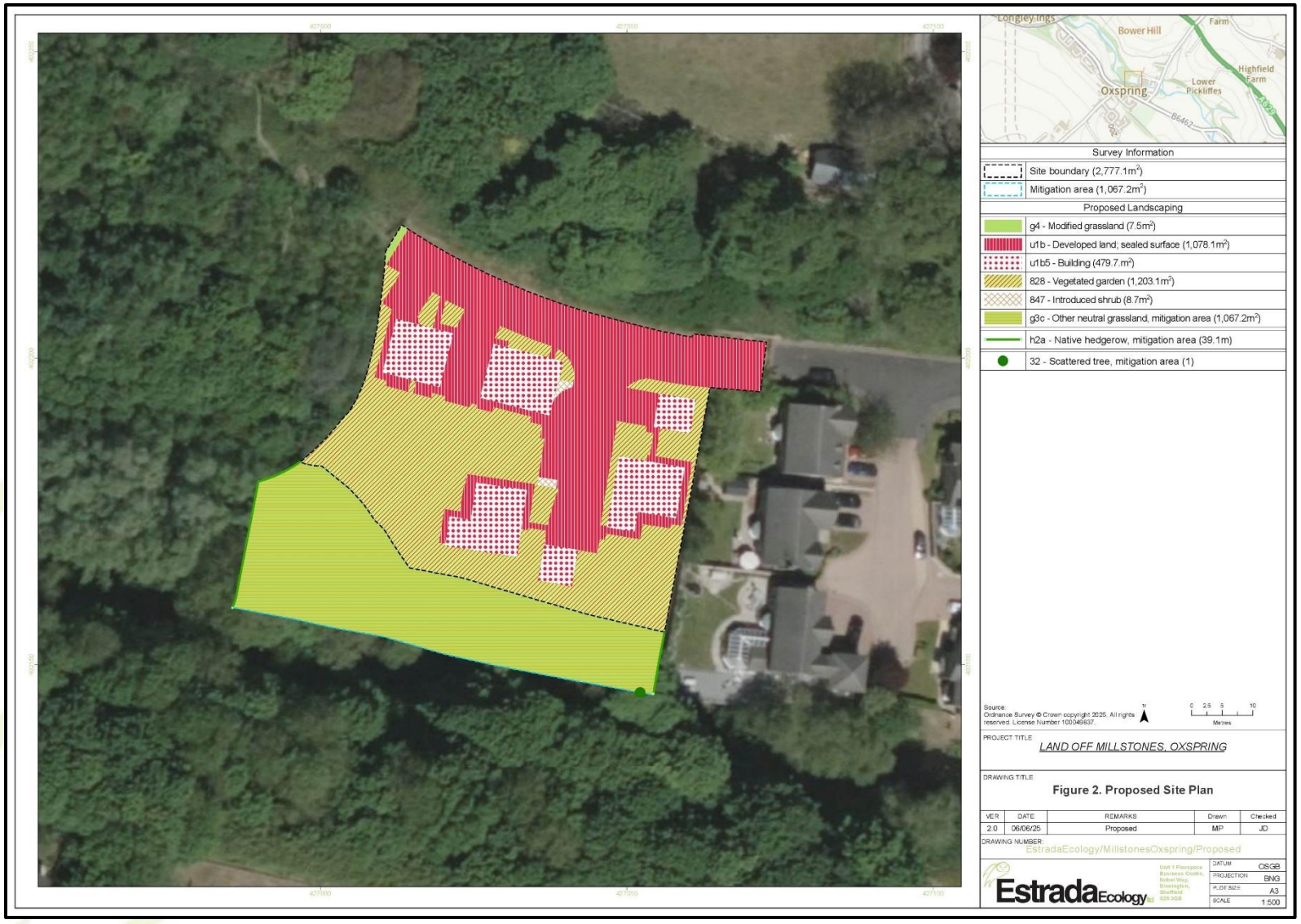


Figure 2: Current UK HABS Post-development Habitat Classification Map



4 Methodology

4.1 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.

4.2 Development proposals submitted after 12th of February 2024, with some exceptions, will be expected to achieve a minimum of 10% net gain in site biodiversity value under The Environment Act 2021 (Commencement No. 8 and Transitional Provisions) Regulations 2024.

4.3 The Statutory Biodiversity Metric Tool was used to calculate biodiversity units for baseline and post-development units for the development site, to determine if the proposed development will be likely to achieve net loss, no net loss, or net gain of biodiversity units.

- Individual habitat areas / lengths were rounded to four decimal places, with the minimum mappable unit being 0.0001 hectares. The canopy areas of Individual trees were calculated using the Urban Tree Helper tool included within the metric calculator. Linear habitat features such as hedgerows and ditches are measured in kilometres, where present.

- Habitat condition indicates the quality of the habitat, either existing or to be achieved, based on the habitat condition assessments using the Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology.

- Habitats were assessed for their strategic significance at a landscape scale, using information from sources such as Local Plans, Biodiversity Action Plans, and Nature Recovery Areas to determine their significance within a specific landscape. If habitats weren't included within published reports, significance was determined by their contribution to habitat connectivity and green corridors.

4.4 Biodiversity unit calculations are based on the retention and / or enhancement of existing habitats within the proposed scheme design, as well as the creation of new habitats. Biodiversity units for hedgerow and watercourse habitats (linear) are calculated separately from area habitat within the metric.

5 Limitations

5.1 Habitat areas are rounded up or down to the nearest whole value, with a minimal mappable unit of 0.0001 hectares. However, the overall total of site habitat area and biodiversity units within the Statutory Metric are calculated and accurate to two decimal places.

5.2 Habitat areas used in the calculations are based on two-dimensional plans and so will not necessarily consider an increase in overall surface area as a result of slopes and banks.

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5.3 In line with current guidance, any landscaping proposed within private vegated garden (trees and hedgerow) have been incoperated into the value of the vegetated garden habitat.

5.4 The site falls wholly within a Green belt designation. Consiquently, all scoring habitats have been assessed as Formally identified.

5.5 The land within the wider property not included within the redline development boundary is understood to be requested for use for biodiversity offsetting. This assessment is based upon this approach. If this agreement cannot be secured, this BNG report should be dismissed.

5.6 It is understood that the proposed enhancements in the blueline boundary regard the enhancement of Poor condition Modified Grassland to Moderate Other Neutral Grassland. Furthermore, a surface water drainage outflow pipe is proposed to discharge into the river Don. Collectively, these modifications do not functionally reduce the condition of the river and no net change in watercourse units are anticiapted.

6 Biodiversity Net Gain

6.1 The onsite baseline consists of the following habitats at the following conditions. Justifications for condition assessment and strategic significance outlined in Metric comments.

Table 1: Onsite Baseline Habitats

Onsite Baseline Habitats	Condition	Strategic Significance
Developed Land Sealed Surface	N/A	None
Artificial Unvegetated Unsealed Surface	N/A	None
Modified Grassland	Poor	Formally Identified
Ruderal / Ephemeral	N/A	Formally Identified

6.2 The total baseline for biodiversity units for the site were calculated to be 0.58 area habitat units. No linear habitat units or watercourse untis were calculated at the baseline. No irreplaceable habitats are present at the baseline.

6.3 To achieve the target 10% net gain above the baseline site value, the post-development plan will need to demonstrate a total value of 0.64 area habitat units, minimum.

6.4 The offsetting site baseline consists of the following habitats at the following conditions. Justifications for condition assessment and strategic significance outlined in Metric comments.

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Table 1: Offsite Baseline Habitats

Offsite Baseline Habitats	Condition	Strategic Significance
Modified Grassland (enhanced)	Poor	Formally Identified
Ruderal / Ephemeral	N/A	Formally Identified
Individual Tree (Retained)	Good	Formally Identified
Priority River (Retained)	Moderate	Formally Identified

6.5 The post-development site, including any retained / enhanced habitats, consists of the following created habitats at the following conditions. Justifications for target conditions and strategic significance outlined in the Metric comments.

Table 3: Created post-development Habitats (onsite and offsite).

Post-development Creation Habitats	Condition	Strategic Significance
Onsite		
Buildings	N/A	None
Developed Land Sealed Surface (created)	N/A	None
Developed Land Sealed Surface (retained)	N/A	None
Modified Grassland (retained)	Poor	Formally Identified
Vegetated Garden	N/A	Formally Identified
Introduced Shrubs	N/A	Formally Identified
Offsite		
Other Neutral Grassland	Moderate	Formally Identified
Individual Tree (retained)	Good	Formally Identified
Priority River (retained)	Moderate	Formally Identified
Native Hedgerow	Poor	Formally Identified

6.6 The development site post-development is calculated to have a total value of 0.27 habitat untis.

6.7 The development site post-development, including the enhancements provided on the offsetting site, are calculated to have a total value of 2.09 area habitat units, 0.09 hedgerow units, and 1.26 watercourse units.

7 Overall Development

7.1 The onsite proposals for the current development scheme will indicatively result in a net loss of 0.31 habitat area units representing a 53.44% net loss for this unit category.

7.2 Overall, the onsite proposals for the current development scheme, including the enhancements provided on the offsetting site, will indicatively result in a net gain of 0.21 habitat area units representing a 36.31% net gain for this unit category, as well as

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a net gain for linear habitat units (not calcuable givne zero baseline), and no net change for watercourse units.

7.3 The Trading Summaries are satisfied for this development proposal in combination with the offsetting enhancements. The Trading Summaries expect that there is no net-loss of any broad habitat group which is not compensated for by units of a higher distinctiveness.

Figure 3: Summary of the Metric Calculations

On-site baseline	*Habitat units*	0.58	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	0.27	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site net change (units & percentage)	*Habitat units*	-0.31	-53.44%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Off-site baseline	*Habitat units*	1.30	
	Hedgerow units	0.00	
	Watercourse units	1.26	
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	1.82	
	Hedgerow units	0.09	
	Watercourse units	1.26	
Off-site net change (units & percentage)	*Habitat units*	0.52	40.12%
	Hedgerow units	0.09	N/A
	Watercourse units	0.00	0.00%
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.21	
	Hedgerow units	0.09	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	*Habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.21	
	Hedgerow units	0.09	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	*Habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	

FINAL RESULTS			
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.21	
	Hedgerow units	0.09	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	36.31%	
	Hedgerow units	N/A	
	Watercourse units	0.00%	
Trading rules satisfied?	Yes ✓		

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	0.58	0.64	0.00
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

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8 Summary and Recommendations

8.1 The site under the current proposed development scheme, including the use of the wider site for offsetting, is indicatively predicted to achieve a net gain for area habitat units and linear habitat units. No net loss to existing watercourse units are calculated.

8.2 The use of the offsetting site for biodiveristy enhancements provide suitable planting which is sufficient to compensate for the losses of baseline habitats. In addition, the Trading Summaries for area habitats are satisfied with the metric results.

8.3 The calculations in this report are based on target habitat conditions post-development and post-management, taking future land usage and public access into consideration. Condition assessments of proposed habitats are also assessed on viability, as well as with the feasibility of appropriate and successful management.

8.4 It is recommended that an updated Biodiversity Net Gain report with updated calculations is completed should current development and landscaping proposals change in any way. An updated report will review habitat condition scores of habitats and will consider any changes in a final masterplan.

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References

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Environment Bank (2016) Biodiversity Accounting – An introduction. Environment Bank.

Environment Bank (2021) The Environment Bill and Biodiversity Net Gain Delivery. Available online at https://www.environmentbank.com/blog/theenvironment-bill-and-biodiversity-net-gain-delivery-what-planning-authoritiesneed-to-know/)

Natural England (2024) Statutory Biodiversity Metric User Guide

UK HABS (2023) The UK Habitat Classification : Habitat Definitions. Version 2.0

All online references accessed June 2025.

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PROPOSED SITE PLAN
Scale 1:500

SCHEDULE OF HOUSE TYPES

NUMBER OF	TYPE	SQ/FT
2	2 BED	820
2	3 BED	984
2	4 BED	2059
6		

TREES RETAINED

ROOT PROTECTION

TREES REMOVED

INDICATIVE LANDSCAPING

TREES

PLANTING

HEDGING

ECOLOGY

- SCHWEGLER BAT TUBE 1FR LOCATED AT HIGH LEVEL - REFER TO HOUSE PLANS AND ELEVATIONS FOR DETAILS. 3NO.
- ALLOW FOR 3NO SCHWEGLER GENERAL PURPOSE 2F BAT BOXES INSTALLED IN A CLUSTER ON T2 AS DESCRIBED IN ECOLOGY APPRAISAL.
- SCHWEGLER SWIFT NEST BOX AT LEAST 5.5M ABOVE GROUND LEVEL. 3NO.
- VIVARO PRO HOUSE SPARROW NEXT BOX. 2NO.
- ALLOW FOR 2NO SCHWEGLER GENERAL PURPOSE NEXT BOX 1B LOCATED IN EXISTING TREES AT SITE PERIMETER -POSITIONS TO BE AGREED.

MATERIALS

CALDERDALE DARK BROWN ROOF TILES

OGEE SECTION GUTTERS AND CIRCULAR RAINWATER PIPES IN ALUMINIUM WITH BLACK POWDER COAT FINISH

WHITE DOUBLE GLAZED UPVC WINDOWS SET INTO 75MM REVEALS

CHIMNEY STACKS WITH CLAY CHIMNEY POT

TARMAC FINISH TO ACCESS ROAD, PAVEMENTS

TRANSITION STRIP AS REQUIRED BY HIGHWAYS

BLOCK PAVING TO PARKING AREAS & DRIVES

PAVING TO PRIVATE PATHS & PATIOS

ALL WET ROOMS WINDOWS TO BE OBSCURED GLAZING

Scale @ A3 1:500
Date 28/02/23
Drawn MF
Checked
Drawing No. MSO-002
Rev. K

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Drawing : PROPOSED SITE PLAN

Project : LAND OFF MILLSTONES OXSPRING SHEFFIELD

Client :