



TECHNICAL NOTE:

- (BASIC LEVEL) PRELIMINARY ECOLOGICAL APPRAISAL
- BIODIVERSITY NET GAIN (BNG) ASSESSMENT

SITE NAME & ADDRESS	Land off Boulder Gate, Marsden, Huddersfield HD7 6LJ
DEVELOPMENT PROPOSAL	Construction of dwelling
PLANNING REFERENCE	Not yet registered
DATE	27 November 2025
AUTHOR	Ryan Knight BSc (Hons) MCIEEM - Principal Ecologist

1. INTRODUCTION & BACKGROUND

Knight Sky Ecology Ltd was commissioned to provide ecological services to support the proposed development on land at Boulder Gate. The commission included a basic level Preliminary Ecological Appraisal (including desk study and site-based assessment) and a Biodiversity Net Gain (BNG) assessment which included the following documents:

- The Statutory Biodiversity Metric calculation tool (hereafter referred to as ‘the metric tool’)
- Habitat Condition Assessment
- UK Habitat Classification map – Baseline (Figure 1)
- UK Habitat Classification map – Post-development (Figure 2)

This technical note has been produced to accompany the above listed information and provide an overview of the BNG assessment results along with a baseline of all relevant ecological information for the site.

In England, the primary legislation for the statutory framework for BNG is principally set out under Schedule 7A (Biodiversity Gain in England) of the Town and Country Planning Act 1990. This legislation was inserted into the 1990 Act by Schedule 14 of the Environment Act 2021, and was amended by the Levelling Up and Regeneration Act 2023.

Under the statutory framework for BNG, subject to some exceptions, every planning permission is subject to a condition that the biodiversity gain objective is met (“the biodiversity gain condition”). This objective is for development to deliver at least a 10% increase in biodiversity value relative to the pre-development biodiversity value of the on-site habitat. This increase can be achieved through on-site biodiversity gains, registered off-site biodiversity gains or through statutory biodiversity credits.

In response to the unprecedented demand for ecological services driven by BNG, Knight Sky Ecology has developed an appropriately scaled survey approach tailored to very minor development proposals. The level of ecological information presented in this document is considered proportionate to the scale of the project, the existing site conditions and the limited complexity of potential impacts that may arise as a result of the construction of the development.



2. METHODS

The ecology data including the metric tool and the pre and post development habitat maps are based on the red-line planning boundary provided by the agent. All land within the red-line boundary is referred to as 'the site'.

The latest version of the metric tool and User Guide (3 July 2025) have been accessed from:
<https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

Desk Study

The Multi-Agency Geographic Information for the Countryside (MAGIC) mapping tool (Available from: <https://magic.defra.gov.uk/>) was used to search for ecological information contained within the following datasets:

- Statutory designated sites for nature conservation (e.g. Sites of Special Scientific Interest (SSSI)) including SSSI Impact Risk Zones - to assess for likely impacts on SSSI.
- Priority habitats (as listed within Section 41 of the Natural Environment and Rural Communities Act 2006) within a 250m radius.

Geospatial datasets for Local Wildlife Sites and Kirklees Wildlife Habitat Network were downloaded from <https://datamillnorth.org> and analysed with use of Geographical Information System (GIS) software (QGIS).

Basic initial information about the site and surrounding area was also obtained from aerial imagery and Ordnance Survey maps in order to provide further contextualised information to the site survey findings.

Site Surveys

General Walkover and Habitat Survey

A site walkover was undertaken on 4th November 2025 by Ryan Knight MCIEEM (Full member of the Chartered Institute of Ecology and Environmental Management).

The aim of the site visit was to gather sufficient baseline information of the habitats within the site and to identify any habitats or features of potential ecological significance. All habitats within the site were described and mapped using UK Habitat Classification (UKHab) Version 2 definitions (UKHab Ltd, 2023).

In addition, the site visit included a search for incidental evidence of protected or notable species and an assessment of the sites potential to support protected or notable species.

The site visit was undertaken outside of the standard habitat survey season (April to September). However, the site habitats were very basic only and a sufficient level of information was obtained for the assessment.



3. RESULTS

DESK STUDY

Internationally / Nationally Designated Sites

The proposed development is located approximately 1km north of Dark Peak SSSI which includes the Peak District Moors (South Pennine Moors Phase 1) Special Protection Area (SPA) and The South Pennine Moors Special Area of Conservation (SAC). These sites are designated for their important upland habitats, breeding birds and geological interests.

Locally Designated Sites

Huddersfield Narrow Canal Local Wildlife Site (LWS) is located 350m north-west. The canal has been designated for its open water habitat and associated vegetation.

Green Hill Clough LWS and Drop Clough LWS are located 650m and 750m north respectively. No citation information was obtained for these sites. However, both LWS include ancient woodlands.

Priority Habitats

The nearest priority habitat comprises a large area of upland heathland located 175m east. There is also a large area of deciduous woodland located 230m west.

Habitat Degradation

None recorded.

Kirklees Wildlife Habitat Network

The development site is not within Kirklees Wildlife Habitat Network.

SITE SURVEY

Habitats

g4 Modified grassland and u1b6 Other developed land

The site comprised a vacant corner plot located at the junction of Gate Head and Meltham Road. It had been set aside for the construction of a dwelling several years ago, and the base walls and footings remain present within the site. A partly constructed garage was also present. The site now consists of a species-poor rank grassland. The most dominant grasses included red fescue (*Festuca rubra*) and cocks-foot (*Dactylis glomerata*), with occasional ryegrass (*Lolium perenne*), Yorkshire fog (*Holcus lanatus*), smooth meadow-grass (*Poa pratensis*), and rare tufted hairgrass (*Deschampsia cespitosa*). Aside from creeping buttercup (*Ranunculus repens*), forbs were scarce and limited to spear thistle (*Cirsium vulgare*), creeping thistle (*Cirsium arvense*), fox-and-cubs (*Pilosella aurantiaca*), hedgerow crane's-bill (*Geranium pyrenaicum*), and wood avens (*Geum urbanum*). Mosses were also found occasionally. In addition to the grasses, an area adjacent to the garage was dominated by ivy (*Hedera helix*) cover with occasional bracken (*Pteridium aquilinum*). This ivy originated from the adjacent private garden.

The value of the site habitats is 0.08 units.



Invasive Non-native Species (INNS)

A small stand of cotoneaster (*Cotoneaster* sp.) was growing along the stone boundary wall, likely originating from plants in the adjacent private garden. There are over 100 species of cotoneaster cultivated in the UK, of which five are listed as invasive. The species present was likely to be Franchet's cotoneaster (*C. franchetii*), which is not currently listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

Adjacent land

The site is bound by dwellings to the north and west and by roads to the east and south. The wider area is a mix of houses, farmland and open moorland.

Hedgerows

There were no hedgerows within the site.

Watercourses

There were no watercourses within the site or within 10m of the site boundary.

Protected and Notable Species of Fauna

Amphibians & Reptiles

No waterbodies of potential to support breeding amphibians were identified within a 250m radius. The site habitats and general location are of a poor suitability to support amphibians and reptiles.

Nesting birds

No habitats of suitability for use by nesting birds were present in the site.

Bats

No trees or structures of suitability to support roosting bats were present within the site. The site is expected to support very low levels of bat activity.

Badgers

The site presents unsuitable conditions for badgers.

Other

No other ecological constraints are likely to be encountered. This is due to the likely absence of certain species from the project working area or it has been assessed that the works will not significantly affect the distribution or abundance of any notable species or result in actions that may be in breach of the relevant legislation.

HABITAT CREATION

Habitats

Figure 2 in Appendix B provides a UK Habitat Classification map of the site as proposed. The new house will have vegetated gardens to the front and rear. The biodiversity value of the site habitat would be 0.03 units.



4. EVALUATION AND SUMMARY

Designated Sites

The Impact Risk Zones for the SSSI indicate that the proposed development is unlikely to have a harmful effect on Dark Peak SSSI and associated SPA and SAC. Consultation with Natural England is not required.

There are no terrestrial or hydrological linkages between any LWS and the proposed development. The intervening distance and absence of connectivity is considered sufficient to determine that the proposed development will not impact any LWS located within the wider area. No further assessment or mitigation is required.

Priority Habitats

The proposal will not adversely affect any priority habitats located in the wider area.

Habitats

The development proposals will result in a net loss of 0.05 habitat units (-60.75%). The development will therefore not meet the biodiversity net gain condition for habitats as the 10% net gain would not be achieved. **A total of 0.06 habitat units are required to achieve a 10% net gain.** This is a relatively small deficit.

In consideration of the existing site habitats along with the site proposals, it would not be feasible to achieve net gain within the site. A 10% gain is highly unlikely to be achieved. The difficulties in achieving net gain on small sites have been acknowledged¹ and the Government are reviewing BNG requirements for small sites.

5. RECOMMENDATIONS

In order to meet the BNG condition, the following option is advised:

Offsite net gain via the purchasing of biodiversity credits

This is a simple process which works as follows:

- The existing metric tool (showing a deficit for habitat units) is forwarded to a habitat bank.
- The habitat bank provides a broken-down quote for supplying the required biodiversity units.
- In line with the requirements of Section 100 Environment Act 2021, habitat banks are governed under a standalone Conservation Covenants with a Responsible Body, as designated by Defra/Natural England. Each habitat bank is fully funded for its lifetime, including lease and management payments, habitat creation works, reporting, and monitoring.
- The quote represents the full cost of the units over the required 30-year period, and the habitat bank would take on the liability for all of the maintenance and management. There are no additional charges (e.g. no legal, agency costs) and there are no ongoing recurring

¹ BNG for Small Sites. Delivering on its potential. January 2025 (CIEEM). Accessed from

<https://cieem.net/resource/biodiversity-net-gain-for-small-sites/>

Improving the implementation of Biodiversity Net Gain for minor, medium and brownfield development.

Consultation document. May 2025. (Defra) Accessed from <https://consult.defra.gov.uk>



payments. The purchase price would be a one-off payment and would provide the applicant with a “clean break”.

- The biodiversity units are fully purchased following planning permission. There is an option to reserve the units via a deposit prior to planning consent. The reservation fee is not refundable if planning permission is refused.
- Once purchased, the applicant would receive a reference number and proof of purchase. This proof of purchase and the number of units would be inputted into the Biodiversity Gain Plan. The Biodiversity Gain Plan and amended metric tool must be submitted prior to commencement (as stated in a mandatory planning condition).

The information within this document demonstrates that the mandatory BNG condition is more than capable of being discharged successfully at the site

Enhancements

The development plans are to include the provision of a bat box on the west elevation as illustrated in the Proposed Floor Plans, Elevations and Site Layout drawing (drawing no. 210-23-PL02a).

APPENDIX A: PHOTOS

Photo 1.

View west from roadside.





Photo 2.

Further view from boundary wall on roadside.



Photo 3.

View towards centre of site with existing footings and base walls.





Photo 4.

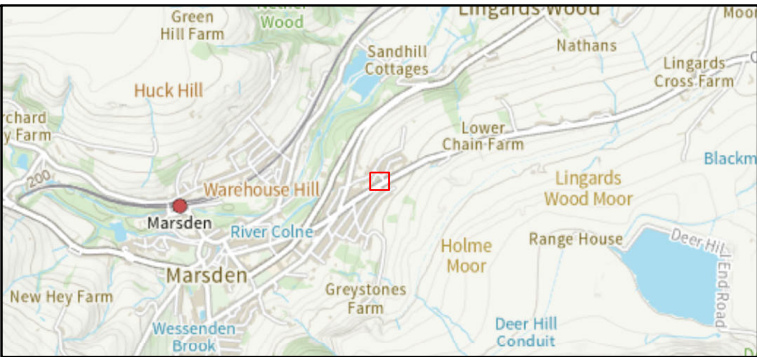
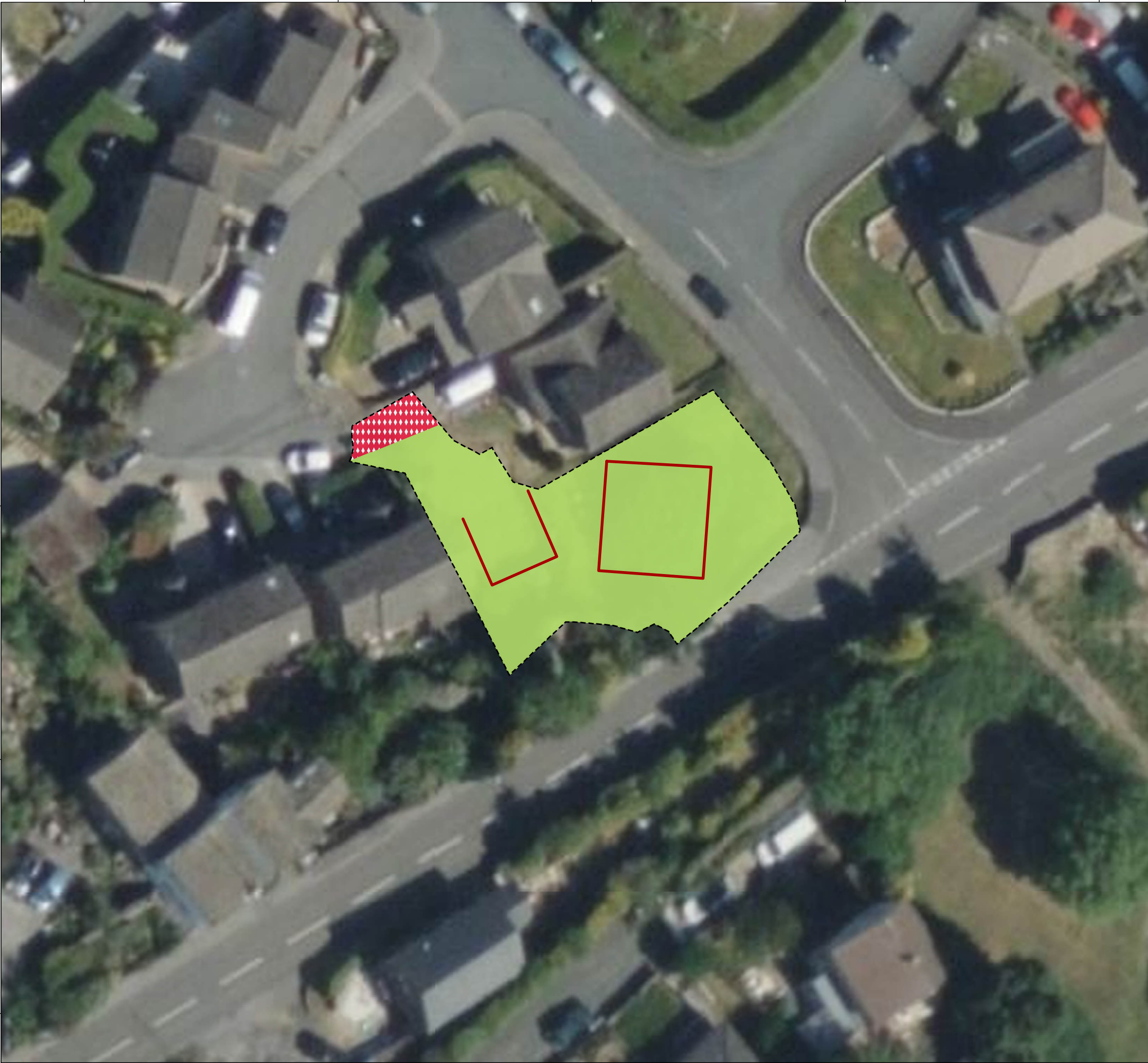
View towards Boulder Gate and proposed access.



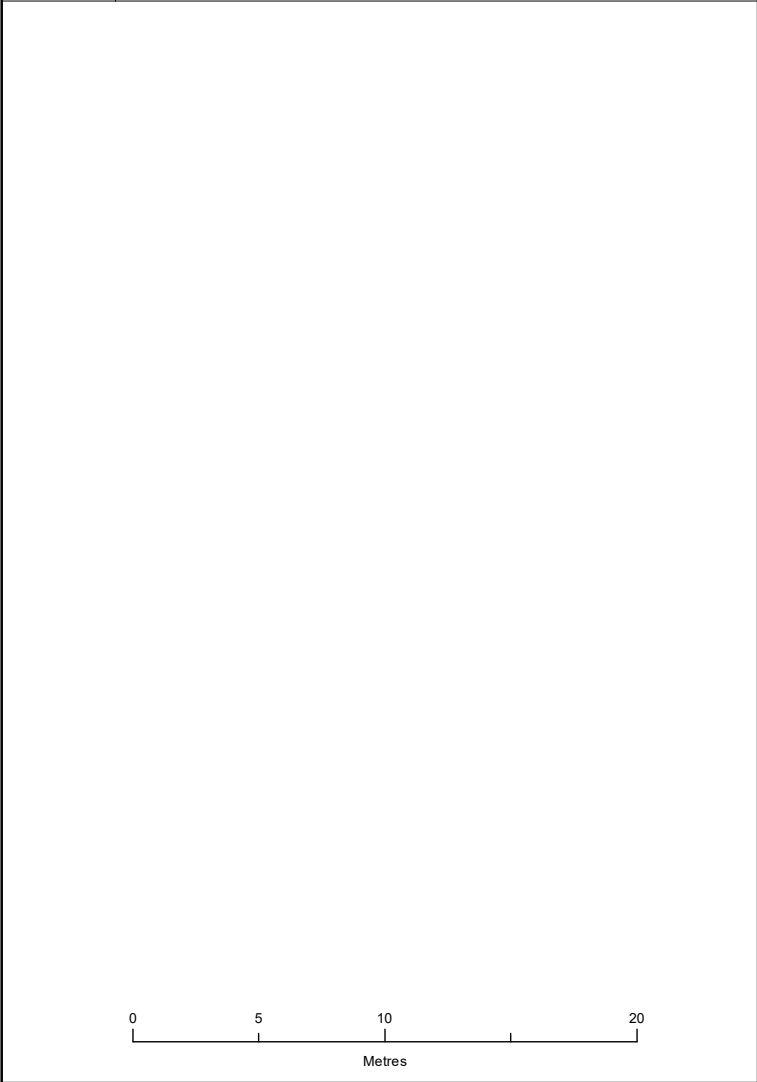


APPENDIX B: FIGURES (NEXT PAGE)

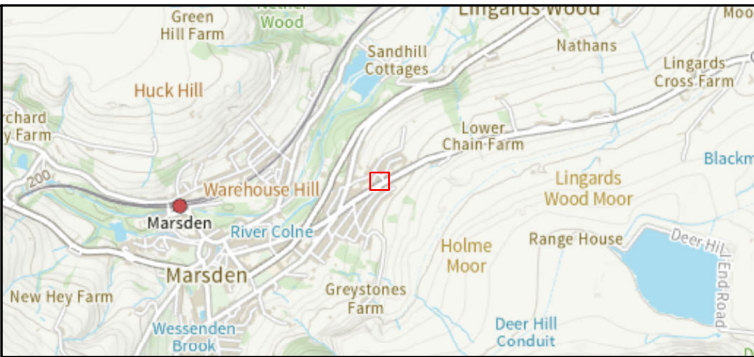
- **FIGURE 1. UK HABITAT CLASSIFICATION MAP (BASELINE)**
FIGURE 2. UK HABITAT CLASSIFICATION MAP (POST-DEVELOPMENT)



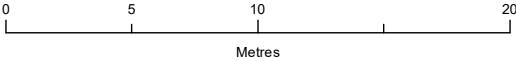
Survey Information	
	Site boundary (414.4m ²)
UKHab Habitat Survey	
	g4 - Modified grassland (396.3m ²)
	u1b6 - Other developed land (18.1m ²)
	853 - Mortared wall (50.9m)



PROJECT TITLE							
LAND AT BOULDER GATE, MARSDEN							
DRAWING TITLE							
Figure 1: UK Habitat Classification Map (Pre-Development)							
VER	DATE	REMARKS	Drawn	Checked			
1.0	25/11/25	Pre-Development	MP	RK			
DRAWING NUMBER:							
KSEcology/BoulderGate/Pre-Development							
SCALE	1:300	PLOT SIZE	A3	DATUM	OSGB	PROJECTION	BNG
Source: Ordnance Survey © Crown copyright 2025, All rights reserved. Licence Number 100049837.				 KNIGHT SKY ECOLOGY			



Survey Information	
	Site boundary (414.4m ²)
UKHab Habitat Survey	
	u1b5 - Building (70.2m ²)
	u1b6 - Other developed land (183.0m ²)
	828 - Vegetated garden (161.2m ²)



PROJECT TITLE							
LAND AT BOULDER GATE, MARSDEN							
DRAWING TITLE							
Figure 2: UK Habitat Classification Map (Post-Development)							
VER	DATE	REMARKS	Drawn	Checked			
1.0	25/11/25	Post-Development	MP	RK			
DRAWING NUMBER:							
KSEcology/BoulderGate/Post-Development							
SCALE	1:300	PLOT SIZE	A3	DATUM	OSGB	PROJECTION	BNG
Source: Ordnance Survey © Crown copyright 2025, All rights reserved. Licence Number 100049837.					 KNIGHT SKY ECOLOGY		