Baseline Habitat Condition Assessment Survey

Site Address:	Land Off The Common, The Common, Fritchley, Belper, Derbyshire DE4 5BW
Client Name:	James Filer
Reference:	Baseline Habitat Condition Assessment
Date:	25th June 2024

Background

Arbtech Consulting Limited was instructed by James Filer to undertake a Habitat Condition Assessment Survey at Land Off The Common, The Common, Fritchley, Belper, Derbyshire DE4 5BW (hereafter referred to as "the site"). The survey was required to inform a planning application for the construction of the erection of up to 17 dwellings and associated infrastructure (hereafter referred to as "the proposed development"). A plan showing the proposed development is provided in Appendix 1.

Previous ecology reports have been produced for the site. These comprise the following:

- Preliminary Ecological Appraisal (PEA) (Astute Ecology, November 2021).
- Important Plants & Habitats Survey (NVC/UKHabs) (June, 2024)
- Badger walkover survey (Arbtech, June 2024).

The aim of the survey was to classify habitats present within the site and undertake a habitat condition assessment to inform a Biodiversity Net Gain Assessment.

Site Location and Landscape Context

The site is located at National Grid Reference SK35285291 and has an area of approximately 0.9ha comprised of lowland meadow and bramble scrub with bordering hedgerows. It is located ~1km east of the River Derwent and ~650m south Crich Common village. The wider landscape comprises blocks of woodland, agricultural land and residential dwellings to the east. A site location plan is provided in Appendix 2.

Survey Methodology

The survey was undertaken during appropriate weather conditions (Temp: 24°C; Wind 6mph; Rain: None) on 25th June 2024 by Nicholas Smith Ecological Surveyor.

Habitat Classification

Habitats within the site were classified in accordance with methodology set out in *UK Habitat Classification Version 2.0* (UKHab Ltd. 2023). All land parcels are described and mapped. Botanical species lists were compiled with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).

Habitat Condition Assessments

Habitat conditions were assessed using methodology detailed within the Statutory biodiversity metric condition assessments (Natural England, 2023) to provide an initial indication of the condition of each habitat recorded. The habitat condition assessments were based on the information collected during the site visit, including the habitat descriptions, species lists, and site photographs.

Results

Habitats recorded on site include:

- **g3a6 -** other lowland meadow
- **h2a –** native hedgerow
- **h3d –** bramble scrub
- **u1e –** built linear features
- **u1b5 –** buildings
- **u1e 114 –** built linear features, dry stone wall

A description of these habitats and their assessed condition is provided in **Table 1**.

Habitat type	Habitat description & condition assessment	Photograph
g3a6 - other lowland meadow (northern field)	***Description*** The site comprises of two fields of lowland meadow grassland. The grassland on the northern field was dominated by yorkshire fog and false oat grass with frequent cocksfoot, common bent, occasional meadow foxtail, common sorrel, ribwort plantain, meadow vetchling and rarely present common knapweed, common hogweed, meadow buttercup, bush vetch, ox-eye daisy, red clover and white clover. The sward was consistently over 7cm with <less 5% bare ground and ~6sp/m^2. ***Condition assessment*** Habitat was assessed using the Grassland Habitat type Condition Sheet (Appendix 4). The grassland was assessed to pass criteria C, D and E and fail criteria A, B, and F. The grassland is therefore assessed to be of poor condition.	

g3a6 - other lowland meadow (southern field)	***Description*** The site comprises of two fields of lowland meadow grassland. The grassland on southern field was dominated by yorkshire fog and false oat grass with frequent sweet vernal grass, meadow vetchling, common bent, occasional common knapweed, meadow buttercup, cocksfoot, and rarely present bush vetch, red clover, common sorrel, ribwort plantain, cats-ear, pignut, tufted vetch, broad-leaved dock, yellow oat grass, meadow foxtail and red clover. The sward was consistently over 7cm with <less 5% bare ground and ~6sp/m^2. ***Condition assessment*** Habitat was assessed using the Grassland Habitat type Condition Sheet (Appendix 4). The grassland was assessed to pass criteria A, C, D and E and fail criteria B and F. The grassland is therefore assessed to be of moderate condition.	
h2a - Native hedgerow	***Description*** Along the western boundary is a hedgerow with a scrub understorey. The hedgerow is >1.5m wide and >1.5m in height. The hedgerow is sparse with continuous gaps throughout the canopy. Species within the hedgerow consist of frequent elder and bramble and rarely present wild cherry and holly. ***Condition Assessment*** Habitat was assessed using the Hedgerow type condition sheet (Appendix 4). The hedgerow is assessed to pass A1, A2, B1, C1, C2, D1 and D2 failed criteria B2. The hedgerow is therefore assessed to be of good condition.	

h3d - Bramble scrub	***Description*** An area of scrub dominated by bramble was present on the western boundary of the site. Further species recorded within the scrub consisted abundant rosebay willowherb, false oat grass, occasional common nettle, curled dock, sowthistle, broad-leaved willowherb and ragwort. ***Condition Assessment*** Habitat condition is predetermined as N/A.	
u1b5 – buildings	***Description*** An overgrown disused train carriage structure was present on site. ***Condition Assessment*** Habitat condition is predetermined as N/A.	

u1e 114 – built linear features, dry stone wall	***Description*** A dry stone wall was present in the centre of the site. The wall hosted bryophyte and lichen communities. The wall also provided shelter habitat for amphibians, reptiles and invertebrates in the form of crevices. ***Condition Assessment*** Habitat condition is predetermined as N/A due to an absence of ecological opportunities.	

Author
Nicholas Smith Ecological Surveyor 16/06/2024

Reviewer
Robbie MacKenzie Principal Ecologist 19/07/2024

Terms and Conditions of Use
Arbtech Consulting Ltd has prepared this report for the sole use of the above-named client or their agents in accordance with our General Terms and Conditions, under which our services are performed. It is expressly stated that no other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us. This report may not be relied upon by any other party without the prior and express written agreement of Arbtech Consulting Ltd.

© This report is the copyright of Arbtech Consulting Ltd. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited and may be chargeable at the absolute discretion of Arbtech Consulting Ltd.

Appendix 1 – Proposed Development Plan



Appendix 2 – Site Location Plan



Appendix 3 – Habitat Map



Appendix 4 – Condition Assessments

Grassland Habitat Type Condition sheet

A	The grassland is a good representation of the habitat type it has been identified as, based on its UKHab description - the appearance and composition of the vegetation closely matches the characteristics of the specific grassland habitat type. Indicator species listed by UKHab for the specific grassland habitat type are consistently present. **Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.**
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 insects, birds and small mammals to live and breed.
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens[1].
D	Cover of bracken *Pteridium aquilinum* is less than 20% and cover of scrub (including bramble *Rubus fruticosus* agg.) is less than 5%.

E	Combined cover of species indicative of sub-optimal condition[2] and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]) are present, this criterion is automatically failed.
F	There are 10 or more vascular plant species per m2 present, including forbs that are characteristic of the habitat type (species referenced in Footnote 2 and 4 cannot contribute towards this count). **Note - this criterion is essential for achieving Good condition for non-acid grassland types only.**

Hedgerow type Condition Sheet

A1.	Height	>1.5 m average along length
A2.	Width	>1.5 m average along length
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length
B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m
C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: · Measured from outer edge of hedgerow; and · Is present on one side of the hedgerow (at least).
C2.	Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA[3]) and recently introduced species.
D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.