bngreport

for Phase 2

Land to South West of Summergrove,
Whitehaven
CA28 8YN
National Grid Field No. NX 9915 9646

October 2024





bringing ecological excellence to local environments

Prepared by: Whistling Beetle Ecological Consultants Limited &

Rubecula Ecology Mowpin Lodge New Road Haigh WN2 1PF

Tel: 07880 733977

e-mail: info@whistlingbeetle.co.uk website: www.whistlingbeetle.co.uk







Contents

		Page
1.0	Introduction	1
2.0	Non-Technical Summary	1
3.0	Project Description	2
4.0	Site Location	2
5.0	Methodology 5.2 Pre – development baseline habitat information 5.6 Post-development habitat information	3 3 4
6.0	Biodiversity Net Gain summary	5
7.0	References	7

Appendices

Appendix 1. Habitat Examples. SWS/BNG/P2/PS01





1.0 Introduction

- 1.1 Whistling Beetle Ecological Consultants in partnership with Rubecula Ecology were commissioned by John Swift Homes (the applicant) to undertake a Biodiversity Net Gain (BNG) Assessment of the proposed Phase 2 development on an area of land to Southwest of Summergrove, Whitehaven CA28 8YN, National Grid Field No NX 9915 8061 (the Site).
 - This report should read in conjunction with the Phase 2 Statutory Metric Calculation Tool which relates to all aspects of the project.
- 1.2 All assessments and surveys were supervised by Principal Ecologist Graham Workman who has over forty-five years professional experience in the ecology field. He has the specialist knowledge and ecological skills to undertake and complete all the surveys contained within this report. Rebecca Curtis at Rubecula Ecology, MSc in Conservation Biology, BSc in Conservation, Wildlife and Zoo Biology, 6 years field experience, over 10 years' experience using QGIS and various data analysis software and recently completed multiple CIEEM training courses on UKHab, QGIS, DEFRA Metric and Biodiversity Net Gain.

2.0 Non-Technical Summary

- 2.1 This report assesses the Biodiversity Net Gain or loss anticipated as a result of the proposals for the change of use from grazed farmland to a housing development. This will lie adjacent to the Phase 1 proposed development and will be referred to as Phase 2 in this report. Please see the Design and Access Statement for exact details of the project. The landscapes contained within the site will be affected and as such a Biodiversity Net Gain Assessment will be carried out.
- 2.2 The Biodiversity Net Gain Assessment relies on a number of assumptions which are detailed within this report. The most recent version of the Statutory Biodiversity Metric Calculation Tool was used for the calculations of this project (Microsoft excel format). As such, the Biodiversity Metric calculator spreadsheet should always accompany this report and vice versa.
- 2.3 The baseline habitat calculations are based on site habitat data collected prior to development-related activities. The post-development habitat calculations are based on proposed landscape plans (see report for details).
- 2.4 This report assesses the biodiversity value of the existing habitats on site and the proposed changes to the development site. This report provides an overview of the change in Biodiversity Value (Biodiversity Net Gain/Loss) generated by the proposals.
- 2.5 The BNG Assessment will indicate how a net loss in biodiversity has occurred as a result of the Phase 2 current proposed development.

2.6 Key Results

The development is estimated to result in a Biodiversity Net Loss of -7.82%. compared with the baseline habitats present due to the large amount of poor condition modified grassland. There was an increase of 341.42% in hedgerows habitat.

It is important to note that the mapping and calculations have been made using the landscape plans M3508-SD-03-V1 Landscape Layout - Phase 2 combined with the most recent footprint drawings '70 Dwelling Scheme'. Changes have recently been made to the footprint and therefore the final landscape plan are still being completed





at the time these figures were calculated. This will mean that there may be some small amendments needed to be made to patio areas surrounding some of the properties, ground level planting and garden size once this is completed. These changes should not significantly impact the results.

3.0 Project Description

3.1 The proposals are for the change of use from grazed farmland to a housing development consisting of 40 houses with gardens, communal grass areas and the creation of two reedbeds.

Please see the Design and Access Statement for more details.

4.0 Site Location

- 4.1 The site is located to the Land to South West of Summergrove, Whitehaven, CA28 8YN, National Grid Field No NX 9915 8061. Entrance to the site is via Dalzell Street. The land is currently in use as grazing pasture for sheep. (see Appendix 1 Site Location Drawing SWS/SL/WB/01)
- 4.2 The land consists of poor-quality grazed grassland surrounded by hedges and trees.
- 4.3 The field consists of poor condition modified grassland with a poor conditioned native hedgerow running the full width of the field.
- 4.4 The site covers an area of approximately 2.98Ha (7.36 acres)
- 4.5 Although the whole field was surveyed only this section will be impacted by Phase 2 development.
- 4.6 The Local Plan took into consideration Copeland's Local Green Spaces.



Figure 1. Location Map of Phase 2 Red-line Boundary, Summergrove Park, Whitehaven.





5.0 Methodology

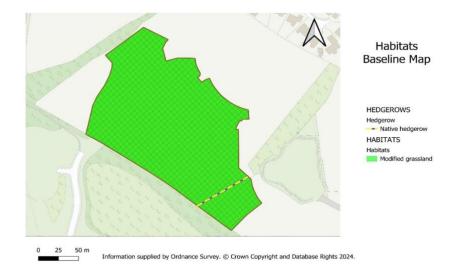
5.1 Ordnance Survey (OS) maps, baseline and proposed site plans, aerial photographs and a site visit were used to identify features of ecological interest within the redline boundary and areas surrounding the site.

Habitat parcels and condition assessments were determined using the UKHab Minimum Mapping Unit of 25m² and where appropriate a 1m² quadrat. Essential secondary codes were used and when applicable additional secondary codes to assist the project. Field data information was digitised using QGIS v3.34.4 software, using co-ordinate reference system EPSG: 27700 OSGB 1936 / British National Grid and the Statutory Biodiversity Metric QGIS template at a scale of 1:100.

5.2 **Pre-development baseline habitat information**

This report is based on data collected during a survey undertaken on the 4th October 2024. Habitat identification and condition assessments were undertaken by Graham Workman of Whistling Beetle Ecological Consultants, an experienced Consultant Ecologist and Rebecca Curtis from Rubecula Ecology. Vegetation and habitat types within the site were noted in accordance with the categories specified in the UK Habs Classification (v2.01) and habitat conditions assessed using the Statutory Biodiversity Metric Condition Assessment sheets.

- 5.3 The site has been used for sheep grazing for several years which has resulted in a species poor modified grassland.
- 5.4 The field was surveyed using a 1m² quadrat. Results showed that there were less than 5 species present on all areas of the field that were surveyed (Parcel 1). An accurate assessment of the plant species was determined by using remaining material and structures which provided a confident identification of which species would be present during the growing periods
- 5.5 Running across the middle of the field is a poor condition native hawthorn hedgerow. This has been impacted by grazing sheep causing significant gapping with no obvious management for a number of years.
 A photo sheet detailing habitat examples is available in Appendix 1 SWS/BNG/P2/PS01







There are no irreplaceable habitats present on site.

Parcel	Broad Habitat Type	UK Habs	Secondary Codes	Condition	Area
1	Grassland	g4	102	Poor	30950m ²
1	Heathland and shrub	h2a6	522	Poor	74m

Table.1 UK Habs polygon attributes (See UK Habs Key and parcel Map)

5.6 **Post-development habitat information**

For reference, the post-development habitat plan is included as Figure 3 of this report. The post-development calculations are based on site proposed drawing M3508-SD-03-V1 Landscape Layout - Phase 2 and '70 Dwelling Scheme'.

Please note, this plan may be superseded or updated without warranting an update of this report, if the changes are insignificant to the impact of the development on biodiversity. The version included within this report is for indicative purposes only and should not be relied upon as the definitive version.

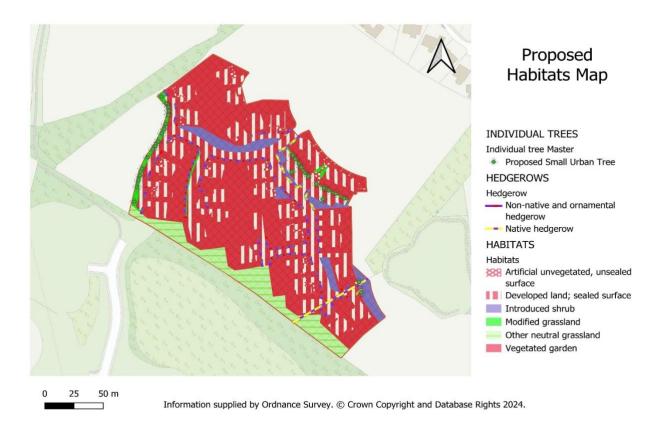


Figure 3. Proposed Habitats Map, Summergrove Park, Whitehaven.





	Habitat units	6.19	
On-site baseline	Hedgerow units	0.15	
	Watercourse units	0.00	
	Habitat units	5.71	
On-site post-intervention	Hedgerow units	0.65	
(Including habitat retention, creation & enhancement)	Watercourse units	0.00	
0 " 1	Habitat units	-0.48	-7.82%
On-site net change	Hedgerow units	0.51	341.42%
(units & percentage)	Watercourse units	0.00	0.00%

Table 2. Displays the Headline unit change as shown in the Statutory Biodiversity Metric

- 5.7 As a result of the Phase 2 development a substantial area of poor condition modified grassland and poor condition native hedgerow will be lost.
- 5.8 Current habitats will be replaced by 40 houses with attached gardens surrounded by pavements and roads. There will be two area of grassland along a roadside which will be mowed short. There will be areas of planted shrubs along roadsides, surrounding carparks and between properties.
- 5.9 Where the site borders Westlakes science park to the west the current modified grassland will be replaced a linear area of good condition other neutral grassland. This will separate the gardens from the hedgerow at the science park.
- 5.10 32 native trees will be planted in non-privately owned areas, specifically along roadsides.
- 5.11 A section of the native hedgerow dividing the site will be removed for the development however a substantial number of native and non-native/ornamental hedgerows will be planted lining the roads and private gardens. These will be part of the HMMP

6.0 Biodiversity Net Gain Summary

The development required a minimum of 10% BNG and with the proposed plans this target has not been achieved. The development results in a habitat loss of -7.82%. There is a 341.42% uplift in hedgerow habitats due to large amounts of native and non-native/ornamental hedgerow planted along the roadsides and garden boundaries. With no opportunity to achieve the uplift on-site then an off-site BNG is required. There is opportunities to achieve this within a separate area of the same field not being used for either Phase 1 and 2 development (blue line boundary).

See the Statutory Biodiversity Metric Calculation Tool attached for a breakdown of all results.

6.2 **UK Habs Key**

102 - Sheep grazed 522 - Native





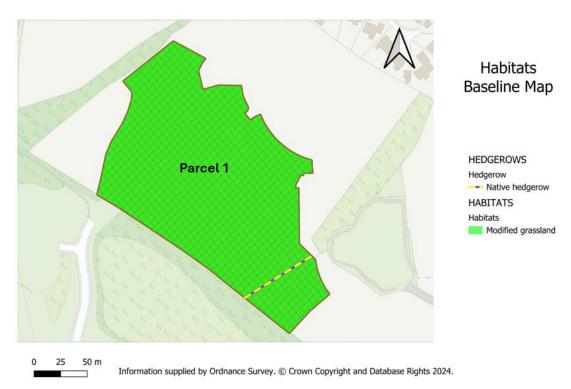


Figure 4. Habitat parcels, Summergrove Park, Whitehaven.





7.0 References

Baker, J., Hoskin, R. & Butterworth, T. (2019). Biodiversity net gain. Good practice principles for development. CIRIA.

British Standards Institution (2013). BS42020 – Biodiversity – Code of practice for planning and development.

UKHab Ltd (2023). UK Habitat Classification Version 2.0 https://www.ukhab.org

Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020b). The UK Habitat Classification – Habitat Definitions V1.1 at http://www.ukhab.org/CIEEM (2019). Biodiversity net gain.

Good practice principles for development. Department for Environment, Food and Rural Affairs (2019).

Net gain. Summary of responses and government responses. Ministry of Housing, Communities and Local Government (2021). National Planning Policy Framework.

Natural England, 2024. The Statuary Biodiversity Metric. Natural England Joint Publication. England Joint Publication. https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides (last updated 25th February 2025)

Royal Horticultural Society (no date). Plants for Pollinators – Garden Plants. rhs.org.uk/plantsforpollinators

Appendix 1



1. Poor condition hedge with sheep grazing damage



2. Hawthorn hedge



3. Top north area of site



4. Northern boundary with good mix of mature native species trees



5. Western site boundary



6. Eastern boundary



7. Grass area just outside of boundary where sheep are excluded



8. Quadrant determining species present



9. Poor quality grass due to grazing sheep



Project

Biodiversity Net Gain Assessment. Habitat Examples

Site

Land to South West of Summergrove, Whitehaven CA28 8YN N. G. Field No. NX 9915 9646

Photo Sheet

SWS/BNG/P2/PS01

Date October 2024

Scale N/

N/A

