



**Brighter strategies**  
for greener projects



**Client:** Cumberland Council  
**Project:** Millom Iron Line  
**Report:** Biodiversity Net Gain Assessment

## QUALITY ASSURANCE

Issue/Revision:	Draft	Final	Final	Final
Date:	March 2025	April 2025	June 2025	July 2025
Comments:			Update BNG strategy	Update BNG (based on NVC)
Prepared by:	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Authorised by:	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
File Reference:	553023lt25Mar25DV01_BNGA	553023lt09Apr25FV02_BNGA	553023lt19Jun25FV03_BNGA	553023lt01Jul25FV03_BNGA

## CONTENTS

<b>1.0 EXECUTIVE SUMMARY</b>	<b>1</b>
<b>2.0 INTRODUCTION</b>	<b>4</b>
2.1 SITE DESCRIPTION	4
2.2 PROPOSED DEVELOPMENT	5
<b>3.0 METHODOLOGY</b>	<b>7</b>
3.1 PRE-DEVELOPMENT (BASELINE ASSESSMENT SITE)	7
3.2 POST- DEVELOPMENT (ASSESSMENT SITE)	10
3.3 COMPETENCIES	11
3.4 ASSUMPTIONS	12
<b>4.0 RESULTS</b>	<b>14</b>
4.1 PRE-DEVELOPMENT (BASELINE)	14
4.2 POST-DEVELOPMENT (PROPOSED)	16
<b>5.0 EVALUATION AND DISCUSSION</b>	<b>20</b>
<b>6.0 OFF-SITE COMPENSATION</b>	<b>21</b>
<b>7.0 SUMMARY AND CONCLUSIONS</b>	<b>22</b>

**APPENDIX A PRE-DEVELOPMENT (BASELINE) HABITAT MAP****APPENDIX B POST-DEVELOPMENT HABITAT MAP****APPENDIX C CONDITION ASSESSMENTS****APPENDIX D RELEVANT LEGISLATION AND POLICY****APPENDIX E CORRESPONDANCE WITH HABITAT BANK****REFERENCES****Tables**

Table 3.1	UKHab to SBM habitat conversions	8
Table 3.2	Landscaping plans to SBM habitat conversions	12
Table 4.1	Baseline Habitat Units	14
Table 4.2	Post-Development Habitat Units	17
Table C.1	Grassland -Medium or High Distinctiveness Condition Assessment	
Table C.2	Grassland -Medium or High Distinctiveness Condition Assessment Score	
Table C.3	Scrub Condition Assessment	
Table C.4	Scrub Condition Assessment Score	
Table C.5	Grassland Medium or High Distinctiveness Condition Assessments	
Table C.6	Grassland Medium of High Distinctiveness Condition Assessment Score	
Table C.7	Scrub Condition Assessment	

Table C.8 Scrub Condition Assessment score

## Figures

Figure A.1 Pre-development (Baseline) Habitat Map

Figure B.1 Post-development Habitat Map

Figure E.1 Correspondence with the Habitat Bank

## 1.0 EXECUTIVE SUMMARY

Greengage Environmental Ltd (Greengage) was commissioned by Cumberland Council in March 2025 to undertake a Biodiversity Net Gain Assessment (BNGA) to support a planning application at Hodbarrow Nature Reserve and a parcel of land immediately north of the nature reserve proposed for development as a Visitor Centre and car park, located on the south-west coast of Cumbria.

The BNGA aims to quantify the predicted change in biodiversity value of the assessment site (see Figure A.1 Appendix A) using the Statutory Biodiversity Metric (SBM) in light of the proposed development to assess compliance against national and local planning policy and against the Biodiversity Net Gain (BNG) mandate set out in the Environment Act 2021, which states that all planning permissions granted in England (with a few exemptions) will have to deliver at least 10% BNG.

This document is a report of this BNGA to support a planning submission for the site which seeks *"Erection of visitor centre with café/shop, group room, staff/volunteer, toilet facilities and vehicle parking; consolidation, repair and installation of interpretive sculpture to Towsey Hole Windmill; refurbishment of existing Tern Island Hide; new bird hides, pathways, gateway features, street furniture, and demarcation of spaces at existing car park; enhancement of wildlife habitats; associated landscaping and drainage infrastructure; and maintenance of byway with restricted vehicular access -The Iron Line Project."*

The parcel of land immediately to the north of the reserve is proposed for the Visitor Centre and car park and comprises hardstanding, mixed scrub, bramble (*Rubus fruticosus*) scrub and hawthorn (*Crataegus monogyna*) scrub, lowland meadow and lowland calcareous grassland. The wider Hodbarrow Nature Reserve (hereafter referred to as the "nature reserve") extends to 105 hectares (ha) and comprises lagoons, dunes, grasslands and scrubland. The nature reserve is a former iron mine and since 1986 has been owned and managed by the Royal Society for the Protection of Birds (RSPB).

For the purpose of this report the 'planning application boundary' refers to the nature reserve and land proposed for the Visitor Centre and car park excluding the Hodbarrow lagoon, as shown in Appendix A Figure A.1. The planning application boundary extends to 57.91 ha.

The proposals seek to retain 57.36 ha of habitat and lose 0.55 ha of habitat. The assessment site is smaller than the planning application boundary. The inclusion of the entire planning application boundary would skew the SBM due to the area and types of habitats present and makes delivery of 10% BNG disproportionately difficult/impossible to achieve on-site considering the small scale of the development footprint. As agreed with the Local Planning Authority (LPA) (email dated 4th April 2025) only the areas of habitats that will be impacted on the nature reserve (either through loss or creation) have been included in the SBM (see assessment site boundary on Figure A.1 Appendix A). All habitats within the land proposed for the Visitor Centre and car park have been included within the SBM.

Habitats were first identified during a Preliminary Ecological Appraisal (PEA) (2021)<sup>1</sup> and Addendum PEA (2022)<sup>2</sup> undertaken by Appletons throughout May and August 2021 and in January 2022. Additionally, a National Vegetation Classification (NVC) and habitat Condition Assessment was undertaken by FISC Level 6 botanist Styles Ecology Ltd in June 2021 and May 2022<sup>3</sup>. Greengage

undertook an updated survey in March 2025 to re-confirm habitats on-site and undertake a Condition Assessment of the habitats within the assessment site. An updated NVC survey was undertaken in May 2025 by Styles Ecology Ltd which informed this BNG update.

There is irreplaceable habitat (Coastal Sand Dunes) within the nature reserve, however as this area is being retained in its entirety it is not included within the assessment site. As such, it has not been included in the SBM.

Proposed habitat creation includes a total of 0.1160 ha of artificial unvegetated, unsealed surface (which is the formalisation of the paths on-site using natural and permeable materials), a total of 0.3871 ha of developed land; sealed surface (which refers to the Visitor Centre, car park and bird hides). Additionally, the development seeks to break up 0.0358 ha of existing hardstanding to create other neutral grassland and enhance 0.4729 ha of lowland calcareous grassland to good condition and 0.8498 ha of scrub to mixed scrub in good condition.

The locations, extents, conditions and habitat parcel reference numbers of the pre-development (baseline) and post-development habitats are mapped in Figure A.1 and Figure B.1. The habitat values are split into three categories: area-based ‘Habitat Units’ (HU), linear-based ‘Hedgerow Units’ (HeU) and aquatic linear-based ‘Watercourse Units’ (WU) respectively, where applicable to the assessment site. HeU and WU are not applicable to the assessment site.

**The baseline value for the assessment site has been calculated as 22.42 HU and as such 23.78 HU are required to achieve 10% BNG.**

**The post-development designs the assessment site are predicted to deliver 23.94 HU. This is a net gain of 1.52 HU (equivalent to + 6.79% for HU).**

**The design proposals meet the BNG Trading Rules for all habitat distinctiveness levels within the assessment site.**

To achieve the required 10% BNG, an additional 0.72 HU is necessary. There is an area of 0.5371 ha of retained bramble scrub on site that may be enhanced to provide the required units; however, these areas are located on a steep gradient, and it is currently unclear whether long-term management would be feasible. Or 0.2188 ha of bramble and mixed scrub habitat that falls within the Household Waste Recycling Centre gates and it is currently unclear whether long-term management on this land would be feasible.

If these areas of on-site enhancement proves unviable, the applicant will secure the necessary 0.72 HU through off-site compensation by purchasing units from a habitat bank, for example the Environment Bank. RSPB have confirmed that their land cannot be used to achieve 10% BNG.

The proposed development will include areas that will significantly contribute to the biodiversity value of the assessment site, including the creation of other neutral grassland and enhancement of calcareous grassland and mixed scrub habitat. Therefore, a Habitat Management and Monitoring Plan (HMMP) for the habitat retention/enhancement, creation and long term management over 30 years (minimum) will be required for submission to the Local Planning Authority (LPA). When these recommendations are adhered to, the proposals stand to be compliant with legislation and current planning policy.

---

Upon receiving planning permission, the submission of a Biodiversity Gain Plan (BGP) to the LPA will be required.

Alongside the BNGA, qualitative ecological enhancement recommendations have also been provided which contribute to further increasing the ecological value of the scheme. Refer to Greengage's Ecological Impact Assessment<sup>4</sup>.

## 2.0 INTRODUCTION

Greengage Environmental Ltd (Greengage) was commissioned by Cumberland Council in March 2025 to undertake a Biodiversity Net Gain Assessment (BNGA) to support a planning application at Hodbarrow Nature Reserve and a parcel of land immediately north of the nature reserve proposed for development as a Visitor Centre and car park, located on the south-west coast of Cumbria (hereafter referred to as 'the site').

Under the Environment Act 2021, developments are mandated to achieve a 10% biodiversity net gain (BNG) using the Statutory Biodiversity Metric (SBM), and they may also be required to under local policy. Most Local Planning Authorities (LPA) require a 10% net gain delivered against a site's pre-development (baseline) value. This is determined through assessing the condition of pre-development habitats on the assessment site i.e. calculating the baseline at the BNGA Baseline stage, followed by comparison against the anticipated changes in biodiversity value based on the development proposals.

For the purpose of this report the 'planning application boundary' refers to the nature reserve and land proposed for the Visitor Centre and car park excluding the Hodbarrow lagoon, as shown in Appendix A Figure A.1. The planning application boundary extends to 57.91 hectares (ha).

The proposals seek to retain 57.36 ha of habitats and lose 0.55 ha of habitats. The BNGA assessment site is smaller than the planning application boundary and extends to 7.52 ha. The inclusion of the entire planning application boundary would skew the SBM calculations due to the area and types of habitats present and makes delivery of 10% BNG disproportionately difficult/impossible to achieve on-site considering the small scale of the development footprint. As agreed with the Local Planning Authority (LPA) (email dated 4th April 2025) only the areas of habitats that will be impacted on the nature reserve (either through loss or creation), have been included in the SBM (hereafter referred to as 'the assessment site') (see Figure A.1 Appendix A). All habitats within the land proposed for the Visitor Centre and car park have been included within the SBM.

The BNGA was undertaken in April 2025 and updated in June and July 2025. Any further changes to the design will impact upon the BNG score and the SBM calculations will need to be updated to reflect such changes. This also carries forward throughout the entire lifetime of the project, including after planning permission has been granted, in and throughout the construction phase. BNG aims to give an accurate reflection of the changes happening on-site.

### 2.1 SITE DESCRIPTION

The planning application boundary extends to 57.91 ha and is centred on Ordnance Survey National Grid Reference (OS NGR): SD 17718 78724, OS Co-ordinates 317718, 478724. The BNGA assessment site extends to 7.52 ha. Both the planning application boundary and the assessment site can be seen in Appendix A.

The site is located on the edge of the Duddon Estuary in south-west Cumbria. The site encompasses the Hodbarrow Nature Reserve (hereafter referred to as the 'nature reserve') which extends to 105 ha in total and comprises lagoons, dunes, grasslands and scrubland. However, the Hodbarrow lagoon falls

outside the site boundary as the development is on terrestrial habitats only. The location for the proposed Visitor Centre is sited on a pocket of land encompassing approximately 2.1 ha to the north of the nature reserve which comprises dense scrub, calcareous grassland and an access road which leads to a Household Waste Recycling Centre off-site to the north.

The nature reserve was once a former iron mine which opened in the early 1860s closed in 1968. The majority of buildings associated with the mine have been removed however the reserve is scattered with remnants from the mine in the forms of old stone walls, quarries, lighthouses, beacons and the partial remains of an unsuccessful sea wall. In 1905, a successful attempt at a large tidal breakwater was built to protect the ironworks from the sea and still stands today. Following the mines' closure the area behind the seawall was flooded and formed a, now freshwater, lagoon (Hodbarrow Lagoon) which supports large populations of wintering and breeding wildfowl and waders. The RSPB purchased the nature reserve in 1986 and their management practices include scrub clearance and the creation of limestone slag islands within the lagoon which have successfully encouraged and sustained breeding populations of little terns (*Sternula albifrons*), common terns (*Sterna hirundo*) and sandwich terns (*Thalasseus sandvicensis*). The nature reserve is part of the Duddon Estuary Site of Special Scientific Interest (SSSI) and Morecambe Bay and Duddon Estuary Special Protection Area (SPA), Special Area of Conservation (SAC) and Ramsar site. The populations of breeding terns and wintering wildfowl using Hodbarrow lagoon contribute to the wider designation of Duddon Estuary and Morecambe Bay SPA and Duddon Estuary Ramsar Site.

The nature reserve is part of a popular 3-mile circular walk which takes visitors on paths through the dense willow and bramble scrub, through calcareous grasslands, past the sand dunes and along the sea wall looking out over the Hodbarrow lagoon to the north and the Irish sea to the south. The sea wall loops across to a caravan park 0.3km east of Haverigg. The mosaic of habitats on-site supports rich and diverse plant communities and assemblages of invertebrates.

## 2.2 PROPOSED DEVELOPMENT

The proposed development seeks to develop a Visitor Centre and car park, repair and install an interpretive sculpture to Towsey Hole Windmill, refurbishment of the existing Tern Hide; new bird hides, pathways, gateway features and street furniture and maintenance of the Byway Open to All Traffic (BOAT). The soft landscaping elements seek enhancement of wildlife habitats. The ecology, heritage and the natural landscape setting have been considered throughout the design process.

Greengage have liaised with the design team on a weekly basis and engaged with the Council, Natural England and RSPB throughout the design process to support an earlier planning application. Greengage have communicated the ecological constraints and opportunities to the design team which has been informed by the Phase II survey results<sup>6</sup>. The designs have been adapted throughout the process as and when any new relevant ecological constraints were identified. The proposals for the updated planning application have followed the same principals as the earlier application and RSPB and Natural England have been kept up to date. The development process has sought to follow the mitigation hierarchy throughout the design stage.

Habitats have been largely retained on-site. First and foremost the development has sought to avoid harm to ecological features. The area of the Visitor Centre and car park has been selected as it is currently comprised of common and widespread dense scrub habitat. An area of car parking has been moved to avoid Annex I habitat, in light of the 2022 National Vegetation Classification survey<sup>5</sup>.

Plans for a new hide which would involve clearing a large strip of scrub have been abandoned and the new hide will be situated in an area that does not require as much clearance.

Some habitat loss will be required to formalise the paths around the site. These paths have been selected as they are already subject to significant erosion due to disturbance through visitor footfall. These paths require formalisation to ensure the site is accessible to all and through this formalisation, the paths will be narrowed.

The 'Proposed Site Layout' produced by Layer Studio, dated 3rd April 2025, has been used as the basis for information regarding the proposed post-development habitats and has been used to inform the comparison against the baseline values.

This has been supplemented by the following documents:

- 289-LYR-XX-ZZ-DWG-L-1000 [GA \_ Site Masterplan] Rev P01; and
- 289-LYR-XX-ZZ-DWG-L-1203 [GA \_ Welcome Building 1\_200] Rev P02.

The development seeks to secure the long-term conservation and enhancement of the habitats and species at site through a sustained commitment to management; the absence of which could create risks for some of the sensitive habitats due to successional change or continued degradation from human trampling.

## 3.0 METHODOLOGY

### 3.1 PRE-DEVELOPMENT (BASELINE ASSESSMENT SITE)

#### Habitat Data

Habitats on the assessment site were first surveyed by Appletons for the scheme during a Preliminary Ecological Appraisal (PEA) (2021)<sup>6</sup> and Addendum PEA (2022)<sup>7</sup> throughout May and August 2021 and in January 2022. Additionally, a National Vegetation Classification (NVC) and habitat Condition Assessment was undertaken by FISC Level 6 botanist Styles Ecology Ltd in June 2021 and May 2022<sup>5</sup>.

Given the time since previous surveys Greengage undertook an updated Preliminary Ecological Appraisal in March 2025 (hereafter referred to as the 2025 PEA Update) in accordance with guidance in the UK Habitat Classification System (UKHab)<sup>8</sup> and the Chartered Institute of Ecological and Environmental Management (CIEEM) (2017) Guidelines for Preliminary Ecological Appraisal<sup>9</sup>, in accordance with British Standard (BS) 42020: 2013: Biodiversity<sup>10</sup>. The PEA was undertaken to re-confirm habitats on the site and undertake a SBM Condition Assessment (See 'Habitat Condition' below) on the habitats within the development footprint. Additionally, an update NVC survey was undertaken, during the optimal season for botanical identification on 3rd and 4th May 2025 by Styles Ecology Ltd to reconfirm the habitats identified in previous surveys. by Areas of each habitat type were taken from the baseline habitat map within Quantum Geographical Information System (QGIS) software and Computer Aided Design (CAD) (Appendix A) provided by Appletons and Styles Ecology Ltd which were amended to the 2025 PEA and NVC Update findings. The assessment site only includes the areas of habitats that will be impacted (either through loss, enhancement or creation) in the SBM, as agreed with the Local Planning Authority (LPA) (email dated 4th April 2025) (see Figure A.1 Appendix A).

#### Statutory Biodiversity Metric Calculation Tool

This BNGA uses the government mandated methodology within the 'Statutory Biodiversity Metric User Guide' (SBM User Guide), distributed by Department for Food Environment and Rural Affairs (DEFRA), February 2024<sup>11</sup>.

BNG uses habitat type and condition as a proxy for overall biodiversity value, measured in Biodiversity Units (BU) which are calculated using the SBM. The BU are separated into area-based Habitat Units (HU), linear-based Hedgerow Units (HeU) and aquatic linear-based Watercourse Units (WU), as applicable to a site, respectively. For the assessment site, HU is applicable.

The following information on each habitat type are the required SBM inputs:

- Type;
- Area/length;
- Condition; and
- Strategic significance.

The areas of each habitat parcel are measured, with each habitat parcel assigned a 'Distinctiveness', 'Condition' and 'Strategic Significance' score. Distinctiveness is a default score for the habitat classification, representing its inherent biodiversity value, whereas condition refers to the state each habitat parcel is in relative to a predetermined set of criteria outlined in the SBM User Guide.

Strategic significance draws upon priorities and objectives within local plans and strategies, and is measured by providing habitats with a score from low to high as follows:

- Low - "area / compensation not in local strategy";
- Medium - "location ecologically desirable but not in local strategy"; and
- High - "formally identified in local strategy".

To calculate the pre-development (baseline) BU value, habitat data collected during the 2025 PEA Update<sup>4</sup>, PEA (2021)<sup>12</sup> and Addendum PEA (2022)<sup>13</sup> and NVC (2021 and 2022)<sup>5</sup> has been used. This BNGA was updated to reflect the findings from the NVC 2025<sup>14</sup>. A BNGA habitat map has been created based using shapefiles provided by Appletons, Styles Ecology Ltd and from Greengage marking up changes to the data collected in the field. The area extents for each habitat type shown in the BNGA habitat map were then measured using QGIS. See Appendix A.

Distinctiveness values were automatically calculated for the assessment site and habitat conditions were assessed both in the field, and retrospectively using site photos.

The irreplaceable habitat, Coastal Sand Dunes, has been identified on the nature reserve however it falls outside of the assessment site. Impacts to this irreplaceable habitat are not measured by the SBM however this habitat will be retained in full and as such no bespoke compensation action is required.

### Type and Area/Length

Habitat types documented in the PEA using UKHab classifications and primary codes supplemented by secondary codes, where applicable. The SBM uses a classification system based mainly on the UKHab Classification System<sup>8</sup> but with input also from other systems including the Water Framework Directive (WFD) Lakes Typology<sup>15</sup>, the European Nature Information System (EUNIS) habitat definitions<sup>16</sup>, Habitats Directive Annex 1 definitions<sup>17</sup>.

As such, UKHab classifications used in the 2025 PEA Update<sup>4</sup> do not always translate directly into the SBM habitat types that are available for selection within the pre-set drop-down menus. Occasionally UKHab secondary codes provide the key information to be able to allocate the SBM 'best fit' selection for the UKHab habitat type. Habitat conversions that are applicable to the application-site are listed in Table 3.1 below. The SBM classifications are hereafter used throughout the report.

Table 3.1    UKHab to SBM habitat conversions

UKHab Habitat Type	SBM Habitat Type	Reasoning
Quarry- sand and gravel (837)	Artificial littoral coarse sediment	This is relating to a pocket around the existing bird hide along the sea wall. Whilst this habitat was not strictly a

UKHab Habitat Type	SBM Habitat Type	Reasoning
		quarry, this area is part of a man-made landmass that utilised materials from the quarry area to the north. This area was calcareous in nature and sparsely vegetated. Artificial littoral coarse sediment was used as the area has never been a quarry and it does comprise coarser sediment such as gravel and pebbles.
'Artificial Unsealed Surface'	'Artificial Unsealed Surface'	This refers to the existing BOAT and footpath which are in a poor state of repair.

A habitat parcel reference has been applied for each area-based habitat with a Condition Assessment which is cross-referenced within the SBM calculation tool and Figure A.1.

### Habitat Condition

Where applicable, habitats were subject to a Condition Assessment in accordance with the SBM Condition Assessments. Formalised copies of the Condition Assessments for the Baseline habitats are provided as Appendix C.

Habitats must be quantified using criteria set out by the SBM Condition Assessments to determine their relative condition.

The condition of a habitat is a measure of the biological 'working-order' of a habitat type judged against the perceived ecological optimum state for that particular habitat.

The condition of each habitat type was assessed against pre-set criteria and categorised as either 'Good', 'Fairly Good', 'Moderate', 'Fairly Poor' or 'Poor'. Where a habitat type varies in condition within the assessment site this was recorded and mapped.

### Strategic Significance

The SBM calculation tool accounts for whether the habitat is situated in an area locally identified as significant for nature.

Data on areas and habitats locally identified as significant for nature were obtained from the following:

- Multi-Agency Geographical Information for the Countryside (MAGIC) website for mapped statutory designated sites;
- Cumbria Local Nature Recovery Strategy Local Nature Partnership Habitat Network Maps<sup>18</sup>;
- Habitats listed within the Statement of Biodiversity Priorities for Cumbria County Council<sup>19</sup>;

- The site falls within the local authority of Cumberland Council which is still subject to the former borough council's, Copeland Local Plan 2021-2039<sup>20</sup>;
- Catchment Plans;
- National Character Area profiles; and/or,
- Priority Habitats for Restoration.

Areas within the site that fall within the nature reserve, or a mapped designated site (SAC, SPA, Ramsar and SSSI), have been given the highest strategic significance score of 'Formally identified within local strategy'.

Using the SBM calculation tool, habitat values have been calculated based on whether they occur commonly or whether they are rare, their area (ha) (or length (km) for linear features such as hedgerows), condition and importance within the local area, usually identified from local relevant planning policies or documents.

### 3.2 POST- DEVELOPMENT (ASSESSMENT SITE)

To calculate the post-development BU value, the area extents for each habitat type were measured based on the 'Proposed Site Layout', using Quantum Geographical Information System (QGIS) software. See Appendix B.

Habitat types were inferred from the 'Proposed Site Layout' and discussions with the design team. Where justification for habitat types is required, this has been included in Section 4.0.

Targeted condition scores were assigned by Greengage, using the SBM habitat condition criteria, whilst considering the likely future use of each area on the 'Proposed Site Layout' and what was considered feasible to reach.

In accordance with the BNG Trading Rules, changes in broader habitat types (for example, 'Urban', 'Woodland' and 'Grassland' habitats) are also tracked, and trading habitats is discouraged unless specifically targeted within a local strategy. Trading down of habitats is not permitted.

The definition of 'significant enhancements', in accordance with government guidance<sup>21</sup> is 'areas of habitat enhancement which contribute significantly to the proposed development's BNG, relative to the biodiversity value before development'.

Retention of existing habitat does not count as an on-site enhancement.

What counts as a significant enhancement will vary depending on the scale of development and existing habitat, but these would normally be:

- habitats of medium or higher distinctiveness in the biodiversity metric;
- habitats of low distinctiveness which create a large number of biodiversity units relative to the biodiversity value of the assessment site before development;
- habitat creation or enhancement where distinctiveness is increased relative to the distinctiveness of the habitat before development;

- areas of habitat creation or enhancement which are significant in area relative to the size of the development;
- enhancements to habitat condition, for example from poor or moderate to good.

### 3.3 COMPETENCIES

In accordance with 'British Standard: 8683 (BS:8683) Process for designing and implementing biodiversity net gain – Specification', this BNGA and all associated Condition Assessments have been completed by competent, suitability trained and qualified ecologists.

[REDACTED] Senior Consultant, has an undergraduate degree in Biology (BSc Hons) and a Master's degree in Evolutionary and Behavioural Ecology, holds a Natural England Bat Survey Level 1 Class Licence and is a Qualifying member of CIEEM. [REDACTED] has over seven years' experience in the commercial sector.

[REDACTED] Senior Consultant, has a BSc (Hons) in Ecology and Conservation, an MSc in Conservation Biology and is an Associate member of CIEEM. [REDACTED] has seven years in ecological survey and assessment.

[REDACTED] Associate Consultant, has a BSc (Hons) in International Management and French and MSc in Sustainability and Consultancy. She has over 9 years of experience in her specialist areas of biodiversity net gain, natural capital and ecosystem service assessment. She is a Practitioner member of IEMA.

[REDACTED] Head of Nature (North), has a first class BSc (Hons) in Environmental Science and MSc in Environmental Management and Sustainable Development. She is a full member of CIEEM and an Associate member of IEMA. She co-chairs the IEMA Biodiversity and Natural Capital Steering Group and is a member of the IEMA Policy and Practice Committee. She has over 17 years of ecological consultancy experience and is licenced to survey bats and GCN in England and Wales. She has held mitigation licences for bats and GCN and holds a CL31 water vole displacement licence. Faye co-authored the CIEEM, IEMA and Ciria publication, Mandatory Biodiversity Net Gain in England: Technical Guide.

[REDACTED] Principal Consultant, has a degree in Geography (BSc Hons) and 17 year's experience as an ecologist. She spent over a decade as a Local Authority Ecologist and holds class survey licences for both bats and GCN. She has held bat mitigation licences and worked on monitoring schemes for both bats and GCN. [REDACTED] is Chair of her local badger group and has worked extensively on badger surveying and monitoring as well as delivering badger vaccination schemes for 8 years. She holds a position as a charity trustee for the Cheshire Local Records Centre.

This report was written by [REDACTED], reviewed by [REDACTED] and verified by [REDACTED] and [REDACTED] and [REDACTED] who confirms in writing (see the QA sheet at the front of this report) that the report is in line with the following:

- Represents sound industry practice;
- Reports and recommends correctly, truthfully and objectively;

- Is appropriate given the local site conditions and scope of works proposed; and
- Avoids invalid, biased, and exaggerated statements.

### 3.4 ASSUMPTIONS

#### Statutory Biodiversity Metric Calculation Tool

Strategic significance for the baseline and post-development habitats (except hard landscaping) has been determined to be high '*Formally identified in local strategy*' for all habitats associated with the nature reserve as this is part of the Duddon Estuary Site of Special Scientific Interest (SSSI) and Morecambe Bay and Duddon Estuary Special Protection Area (SPA), Special Area of Conservation (SAC) and Ramsar site.

For habitats (excluding hard landscaping) associated with the land immediately to the north of the nature reserve, the strategic significance was determined to be medium '*Location ecologically desirable but not in local strategy*' given this area is immediately adjacent to the reserve and could provide connectivity.

All habitats that contribute no BU such as Developed land; sealed surface and Artificial unvegetated, unsealed surface were determined to be low strategic significance '*Area/compensation not in local strategy/ no local strategy*' both pre and post-development.

The condition of the habitats, either for the baseline or that a habitat is considered to be able reach post-development, has been assessed using information within the SBM User Guide and based upon the ecologist's judgement of the habitats/input from the landscape architect.

Where there was no suitable UKHab or SBM habitat classification for a habitat described in the landscaping, a 'best fit' alternative has been used with an explanation given to justify its use in Table 3.2. The conversions described in Table 3.1 remain valid.

Table 3.2 *Landscaping plans to SBM habitat conversions*

Landscaping Plan	SBM Habitat Type	Reasoning
Natural and permeable path	'Artificial unvegetated; unsealed surface'	This refers to the formalisation of the existing footpath which will comprise natural and permeable materials.

Note the sum of the values shown in columns within the BU tables may differ from the total units stated. This is due to rounding and is not considered significant. The totals stated reflect those calculated within the SBM calculation tool, based on the SBM User Guide.

On the Visitor Centre site, habitat clearance of dense scrub has taken place to inform Site Investigations which were required to support the proposals and the designs. As per the SBM User Guide, where habitats on-site have recently been destroyed or degraded it has been decided to use pre-degradation habitat types as the assessment site's baseline (as is recommended). Greengage were

---

present on-site to oversee the localised scrub clearance and undertook a Condition Assessment prior to clearance. As such, this pre-clearance biodiversity value has been used to these habitats.

## 4.0 RESULTS

### 4.1 PRE-DEVELOPMENT (BASELINE)

#### *Designated Sites*

The nature reserve is part of the Duddon Estuary SSSI, Morecambe Bay and Duddon Estuary SPA, Morecambe Bay SAC and Duddon Estuary Ramsar site. For best practice, it is acknowledged here that measures to protect these designated sites from impacts by any future development should be undertaken and are fully detailed in the EclA<sup>4</sup>. Full details of the statutory designated sites are shown in the EclA.

#### Statutory Biodiversity Metric Calculation Tool

Using the SBM calculation tool the baseline biodiversity value of the assessment site has been identified to be 21.94 HU.

A breakdown of the baseline calculations for HU is provided in Table 4.1 below:

Table 4.1 Baseline Habitat Units

Broad Habitat	Habitat Type	Area (Hectares)	Distinctiveness	Strategic significance	Condition	Habitat Units*
Grassland	Bracken	0.0312	Low	High	Condition Assessment N/A	0.07
Grassland	Lowland calcareous grassland	0.0127	High	High	Good	0.26
Grassland	Lowland calcareous grassland	0.0006	High	High	Moderate	0.01
Grassland	Lowland calcareous grassland	0.1202	High	Medium	Moderate	1.59
Grassland	Lowland calcareous grassland	0.3077	High	Medium	Moderate	4.06
Grassland	Lowland calcareous grassland	0.1652	High	Medium	Moderate	2.18
Grassland	Lowland meadows	0.0546	V.High	Medium	Good	1.44

Broad Habitat	Habitat Type	Area (Hectares)	Distinctiveness	Strategic significance	Condition	Habitat Units*
Grassland	Other neutral grassland	0.028	Medium	High	Good	0.39
Heathland and shrub	Bramble scrub	0.9846	Medium	Medium	Condition Assessment N/A	4.33
Heathland and shrub	Bramble scrub	0.2145	Medium	Medium	Condition Assessment N/A	0.94
Heathland and shrub	Bramble scrub	0.1084	Medium	Medium	Condition Assessment N/A	0.48
Heathland and shrub	Hawthorn scrub	0.0292	Medium	Medium	Moderate	0.26
Heathland and shrub	Mixed scrub	0.0353	Medium	High	Good	0.49
Heathland and shrub	Mixed scrub	0.0908	Medium	High	Moderate	0.84
Heathland and shrub	Mixed scrub	0.1191	Medium	High	Moderate	1.10
Heathland and shrub	Mixed scrub	0.0455	Medium	Medium	Moderate	0.40
Heathland and shrub	Mixed scrub	0.0362	Medium	Medium	Moderate	0.32
Heathland and shrub	Mixed scrub	0.373	Medium	Medium	Moderate	3.28
Urban	Artificial unvegetated, unsealed surface	4.5954	V.Low	Low	N/A - Other	0.00
Urban	Developed land; sealed surface	0.0278	V.Low	Low	N/A - Other	0.00
Urban	Developed land; sealed surface	0.1372	V.Low	Low	N/A - Other	0.00

Broad Habitat	Habitat Type	Area (Hectares)	Distinctiveness	Strategic significance	Condition	Habitat Units*
*there may be discrepancies in the total figure as the metric rounds to the nearest 0.00					TOTAL	22.42

The above tables have been completed based on the methodologies detailed in Section 3.0 and on application of the below points:

- The pre-development (baseline) habitats have had localised scrub clearance to inform localised Site Investigation Works.
- Greengage were on-site to oversee the scrub clearance and undertook a Condition Assessment of the scrub before clearance and as such the degradation worst case scenario of awarding 'good' condition has not been applied.
- In accordance with the SBM User Guide, 'Developed land; sealed surface', 'Artificial unvegetated, unsealed surface', 'Bramble scrub' and 'Bracken' have no Condition Assessment.
- There are two pockets of 'Lowland calcareous grassland' within the assessment site on the nature reserve. One pocket was given 'good condition' as it did not fail any condition criteria and the other in moderate condition. This is due to failing condition criteria with scrub cover over 5% and presence of occasional invasive species sea buckthorn (*Hippophae rhamnoides*).
- There are three pockets of 'Lowland calcareous grassland' associated with the area proposed for a Visitor Centre and car park that has a condition score of 'moderate' as they failed the condition criteria due to presence of a non-native invasive species, wall Cotoneaster (*Cotoneaster horizontalis*), scrub cover over 5% and the cover of bare ground is not between 1-10%. These areas are proposed to be enhanced through the proposals through the removal of invasive species and the scrub clearance to below 5%.
- There is a small pocket of 'Lowland meadow' which was in 'good' condition having met all but one criteria (presence of invasive species wall Cotoneaster). The 'Lowland meadow' will be cleared to facilitate the development the Visitor Centre and car park.
- The other neutral grassland is located on the nature reserve, this was awarded 'good' condition having met all criteria.
- The mixed and hawthorn scrub only need to fail one criterion to be awarded moderate condition. This criterion was largely that the scrub did not possess clearings, glades or rides however some pockets of scrub also had presence of invasive non-native species sea buckthorn and wall Cotoneaster.

## 4.2 POST-DEVELOPMENT (PROPOSED)

Based on the 'Proposed Site Layout' drawing, the proposed development is predicted to provide 23.94 HU as shown in Table 4.2.

Table 4.2 Post-Development Habitat Units

Broad Habitat	Habitat Type	Area (Hectares)	Distinctiveness	Strategic Significance	Condition	Habitat Units*
<b>Retained</b>						
Grassland	Lowland meadows	0.0546	V.High	Medium	Good	1.44
Heathland and shrub	Bramble scrub	0.7269	Medium	Medium	Condition Assessment N/A	3.20
Heathland and shrub	Mixed scrub	0.0455	Medium	Medium	Moderate	0.40
Urban	Artificial unvegetated, unsealed surface	4.5936	V. Low	Low	N/A - Other	0.00
Urban	Developed land; sealed surface	0.0278	V. Low	Low	N/A - Other	0.00
Urban	Developed land; sealed surface	0.1014	V. Low	Low	N/A - Other	0.00
<b>Enhanced</b>						
Grassland	Lowland calcareous grassland	0.1202	High	Medium	Good	1.54
Grassland	Lowland calcareous grassland	0.3077	High	Medium	Good	4.53
Grassland	Lowland calcareous grassland	0.1652	High	Medium	Good	2.43
Heathland and shrub	Mixed scrub	0.2145	Medium	Medium	Good	2.27
Heathland and shrub	Mixed scrub	0.1084	Medium	Medium	Good	1.14
Heathland and shrub	Mixed scrub	0.1177	Medium	Medium	Good	1.50

Broad Habitat	Habitat Type	Area (Hectares)	Distinctiveness	Strategic Significance	Condition	Habitat Units*
Heathland and shrub	Mixed scrub	0.0362	Medium	Medium	Good	0.46
<b>Created</b>						
Grassland	Other neutral grassland	0.0358	Medium	Medium	Moderate	0.26
Urban	Artificial unvegetated, unsealed surface	0.1027	V.Low	Low	N/A - Other	0.00
Urban	Artificial unvegetated, unsealed surface	0.0133	V.Low	Low	N/A - Other	0.00
Urban	Developed land; sealed surface	0.0982	V.Low	Low	N/A - Other	0.00
Urban	Developed land; sealed surface	0.2889	V.Low	Low	N/A - Other	0.00
*there may be discrepancies in the total figure as the metric rounds to the nearest 0.00					<b>TOTAL</b>	<b>23.94</b>

The above tables have been completed based on the methodologies detailed in Section 3.0 and on application of the below points:

## Enhanced habitats

- The pockets of moderate 'Lowland calcareous grassland' will be enhanced from moderate to good through the removal of invasive and nuisance species as well as the reduction of scrub cover to less than 5%.
- The pockets of 'Mixed scrub' will be enhanced from moderate to good condition through the removal of invasive and nuisance species as well as rotational management to increase age and structural diversity as well as create glades, clearings and rides surrounding the Visitor Centre and car park.
- The pocket of 'Bramble scrub' will be enhanced to 'Mixed scrub' through the inclusion of other woody species identified on the site such hawthorn (*Crataegus monogyna*), goat willow (*Salix*

*caprea*), grey willow (*Salix cinerea*), gorse (*Ulex sp.*), broom (*Cytisus scoparius*) and dog rose (*Rosa canina*). It should be monitored to ensure the removal of invasive and nuisance species as well as rotationally managed to increase age and structural diversity as well as create glades, clearings and rides.

## Created Habitats

- In accordance with the SBM User Guide, 'Developed land; sealed surface' and 'Artificial unvegetated, unsealed surface' do not have a Condition Assessment. New areas of 'Artificial unvegetated, unsealed surface' will be created as formalised paths up to the new tern hides or the Towsey Hole Windmill. These will be created using natural and permeable materials. The 'Developed land; sealed surface' created refers to the new Visitor Centre and car park as well as three new bird hides
- 'Other neutral grassland' will be created in an area of the existing hardstanding layby. This area will be broken up and removed and sown with the surrounding seedbank. As a precaution it was categorised as 'other neutral grassland' in case the species richness is less than the surrounding habitats. Proposals seek to re-create the habitat within the same environmental context and adjacent geographic position within the landscape, it is considered realistically achievable to re-create this habitat. It will remain adjacent to retained pockets of lowland meadows and retain ecological functionality within the wider landscape. It should be monitored to ensure that any invasive/nuisance species are removed and that scrub encroachment does not exceed over 5%. As a precaution, it is expected to achieve at least 'Moderate' condition. Seeding from an adjacent area of surrounding grassland should be used if monitoring exercises show that the species composition does not match the UKHab description as per essential Criterion A (see Appendix C Table C.1).

## 5.0 EVALUATION AND DISCUSSION

Under the proposals, as set out in the 'Proposed Layout' drawing, and in the absence of additional enhancement measures and habitat creation, the development is predicted to deliver 23.94 HU, which is an increase of 1.52 HU. This corresponds to an equivalent 6.79% gain in BNG. BNG Trading Rules for all habitats been satisfied. A copy of the SBM calculation tool outputs is being submitted with the planning application. The proposals are therefore in compliance with local and national planning policy (see Appendix D).

As the proposals involve the creation of high distinctiveness habitats, the production of a Habitat Management and Monitoring Plan (HMMP) is appropriate to set out the actions required to manage and maintain the habitats to maximise their biodiversity value over the long term (30 years minimum).

Further qualitative ecological enhancement as recommended in the EclA<sup>4</sup> should ideally also be targeted on-site through the provision of reptile and amphibian refugia and hibernacula, invertebrate habitat features (such as pollinator posts), bird boxes (such as for garden birds) and bat boxes, to help protect nationally and locally important species, including those specified in national, regional and local Biodiversity Action Plans.

### Removal of Invasive species

Several species listed on Schedule 9 species as per the Wildlife and Countryside Act 1981 (as amended) were identified during the PEA including Montbretia sp., Japanese knotweed (*Reynoutria japonica*), Cotoneaster sp. Including wall Cotoneaster, small-leaved cotoneaster (*Cotoneaster microphyllus*) and variegated yellow archangel (*Lamium galeobdolon*).

Whilst sea buckthorn is not an invasive species as per Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), it is considered to be an invasive species in the northwest of England. This was found on the site despite efforts from RSPB to eradicate.

The invasive species (inclusive of sea buckthorn) within the assessment site will be removed by specialist contractors and disposed of following best practice guidance<sup>22</sup>. Bio-security principles will be followed throughout the construction to prevent the spread of invasive species and an Ecological Clerk of Works (ECoW) shall be present during works, if required.

The presence of invasive species (inclusive of sea buckthorn) on-site post-works will be monitored over the long-term and their control/removal will be undertaken as necessary as part of ongoing habitat management work.

### Ecological Features

As referenced in the EclA report, further qualitative ecological enhancement should also be targeted on-site through of habitat for nesting birds as well as invertebrate habitat features such as pollinator posts or bee bricks and bat boxes, to help protect nationally and locally important species, including those specified in the Cumbria's Biodiversity Action Plan.

## 6.0 OFF-SITE COMPENSATION

To achieve the required 10% BNG, an additional 0.72 HU is necessary. There is an area of 0.5371 ha of retained bramble scrub on site that may be enhanced to provide the required units; however, these areas are located on a steep gradient, and it is currently unclear whether long-term management would be feasible. Or 0.2188 ha of bramble and mixed scrub habitat that falls within the Household Waste Recycling Centre gates and it is currently unclear whether long-term management on this land would be feasible.

If on-site enhancement proves unviable, the applicant will secure the necessary 0.72 HU through off-site compensation by purchasing units from a habitat bank, for example the Environment Bank.

Greengage contacted the Environment Bank who confirmed that they have a habitat bank within the Cumberland LPA boundary with lowland meadows and heathland and shrub in order to meet 10% BNG (ref: B-CMBR2507).

The client has agreed to the option provided by the Environment Bank and will be reserving these units (see Appendix E) for confirmation. The proposals will, therefore, be in compliance with local and national planning policy and the BNG Mandate.

## 7.0 SUMMARY AND CONCLUSIONS

In accordance with the Environment Act 2021, the National Planning Policy Framework and local policy (Appendix D), developments (with a few exemptions) have to deliver at least a 10% net gain in biodiversity, which should be evidenced through a complete BNGA using the SBM.

As agreed with the LPA (email dated 4th April 2025) only the areas of habitats that will be impacted on the nature reserve (either through loss or creation) have been included in the SBM. All habitats within the land proposed for the Visitor Centre and car park have been included within the SBM.

There is irreplaceable habitat (Coastal Sand Dunes) within the nature reserve, however as this area is being retained in its entirety it is not included within the assessment site. As such, it has not been included in the SBM.

This BNGA has been completed to identify the pre-development (baseline) biodiversity value of the assessment site and compare against the predicted post-development biodiversity value.

**The baseline value for the assessment site has been calculated as 22.42 HU and as such 24.66 HU are required to achieve 10% BNG.**

The post-development designs the assessment site are predicted to deliver 23.94 HU. This is a net gain of 1.52 HU (equivalent to + 6.79% for HU).

The design proposals meet the BNG Trading Rules for all habitat distinctiveness levels within the assessment site.

**The off-site compensation required to meet 10% BNG is 0.72 HU of which the applicant will purchase habitat units from the Environment Bank as off-site compensation.**

To achieve the required 10% BNG, an additional 0.72 HU is necessary. There is an area of 0.5371 ha of retained bramble scrub on site that may be enhanced to provide the required units; however, these areas are located on a steep gradient, and it is currently unclear whether long-term management would be feasible. Or 0.2188 ha of bramble and mixed scrub habitat that falls within the Household Waste Recycling Centre gates and it is currently unclear whether long-term management on this land would be feasible.

The proposed development will include areas that will significantly contribute to the biodiversity value of the wider site, including the creation of other neutral grassland and the enhancement of lowland calcareous grasslands and mixed scrub. Therefore, a Habitat Management and Monitoring Plan (HMMP) for the habitat retention/enhancement, creation and long term management over 30 years (minimum) will be required for submission to the Local Planning Authority (LPA). When these recommendations are adhered to, the proposals stand to be compliant with legislation and current planning policy.

Upon receiving planning permission, the submission of a Biodiversity Gain Plan (BGP) to the LPA will be required.

---

Alongside the BNGA, qualitative ecological enhancement recommendations have also been provided which contribute to further increasing the ecological value of the scheme. Refer to the EclA.

## APPENDIX A PRE-DEVELOPMENT (BASELINE) HABITAT MAP

Figure A.1 *Pre-development (Baseline) Habitat Map*

# IRON LINE

- Planning Application Boundary
- Assessment Site
- Artificial unvegetated unsealed surface
- Bramble scrub
- Developed land; sealed surface
- Lowland calcareous grassland
- Lowland meadows
- Mixed scrub
- Other green roof
- Other neutral grassland



Title: Figure A2

Drawn by [REDACTED]

Date: 01/07/2025

Reviewed by [REDACTED]

Date: 01/07/2025

Project number: 553023

Sources: Google Satellite and OpenStreetMap

## APPENDIX B POST-DEVELOPMENT HABITAT MAP

*Figure B.1 Post-development Habitat Map*

# IRON LINE

- Planning Application Boundary
- Artificial unvegetated unsealed surface
- Bramble scrub
- Developed land; sealed surface
- Lowland calcareous grassland
- Lowland meadows
- Mixed scrub
- Other neutral grassland



Title: Figure A2

Drawn by [REDACTED]

Date: 01/07/2025

Reviewed by [REDACTED]

Date: 01/07/2025

Project number: 553023

Sources: Google Satellite and OpenStreetMap

## APPENDIX C CONDITION ASSESSMENTS

The highlighted green text below indicates which condition has been achieved for each habitat.

### C.1 BASELINE HABITATS

#### Grassland-Bracken

No assessment is required for this habitat as the condition is fixed within the SBM as N/A.

#### Grassland -Medium or High Distinctiveness

Table C.1 Grassland -Medium or High Distinctiveness Condition Assessment

Condition Assessment Criteria	Habitat reference (1)* Calcareous Grassland (CG)	2 (CG)	3 (CG)	4 Lowland meadow	5 Other neutral
A "The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description). <sup>1</sup>  Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only."	Y	Y	N	Y	Y
B Sward height is varied (at least 20% of the sward is less than 7 cm	Y	Y	Y	Y	Y

Condition Assessment Criteria		Habitat reference (1)* <b>Calcareous Grassland (CG)</b>	2 (CG)	3 (CG)	4 Lowland meadow	5 Other neutral
	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 <sup>2</sup> .	Y	N	Y	N	Y
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus agg.</i> ) is less than 5%.	Y	N	Y	N	N
E	Combined cover of species indicative of suboptimal condition <sup>3</sup> 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-	N	N	Y	N	Y

Condition Assessment Criteria	Habitat reference (1)* Calcareous Grassland (CG)	2 (CG)	3 (CG)	4 Lowland meadow	5 Other neutral
native plant species (as listed on Schedule 9 of WCA5) are present, this criterion is automatically failed.					
F "There are 10 or more vascular plant species per m <sup>2</sup> present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count).  Note - this criterion is essential for achieving Good condition for non-acid grassland types only."	Y	Y	Y	Y	Y
Total	5	3	4	4	4

\*Habitat reference as per the SBM

Table C.2 Grassland -Medium or High Distinctiveness Condition Assessment Score

Score	Condition
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)

## Heathland and shrub -Scrub

Table C.3 Scrub Condition Assessment

		6	7
A	<p>The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range).1</p> <ul style="list-style-type: none"> <li>- At least 80% of scrub is native,</li> <li>- There are at least three native woody species2,</li> <li>- No single species comprises more than 75% of the cover (except hazel <i>Corylus avellana</i>, common juniper <i>Juniperus communis</i>, sea buckthorn <i>Hippophae rhamnoides</i> or box <i>Buxus sempervirens</i>, which can be up to 100% cover).</li> </ul>	Y	Y
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran3) shrubs are all present.	Y	Y
C	There is an absence of invasive non-native plant species4 (as listed on Schedule 9 of WCA5) and species indicative of suboptimal condition6 make up less than 5% of ground cover.	Y	Y
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	Y	Y
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Y	N
Total		5	4

Table C.4 Scrub Condition Assessment Score

Condition Assessment Result (out of 5 criteria)	Condition Assessment Score
Passes 5 criteria	Good (3)
Passes 3 or 4 criteria	Moderate (2)
Passes 2 or fewer criteria	Poor (1)

### Urban - Artificial unvegetated, unsealed surface

No assessment is required for this habitat as the condition is fixed within the SBM as N/A.

### Urban - Developed Land; Sealed Surface

No assessment is required for this habitat as the condition is fixed within the SBM as N/A.

## C.2 POST-DEVELOPMENT HABITATS

### Grassland -Medium or High Distinctiveness

Table C.5 Grassland Medium or High Distinctiveness Condition Assessments

Condition Assessment	Created Other Neutral grassland 8	Enhanced Calcareous Grassland 9
A  "The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description).  Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only."	Y	N
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)	Y	Y

Condition Assessment		Created Other Neutral grassland 8	Enhanced Calcareous Grassland 9
	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 <sup>2</sup> .	Y	N
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Y	Y
E	Combined cover of species indicative of suboptimal condition <sup>3</sup> 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 <sup>4</sup> (as listed on Schedule 9 of WCA <sup>5</sup> ) are present, this criterion is automatically failed.	Y	Y
F	"There are 10 or more vascular plant species per m <sup>2</sup> present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count).  Note - this criterion is essential for achieving Good condition for non-acid grassland types only."	Y	Y
Total		4	6

\*Habitat reference as per the SBM

Table C.6 Grassland Medium of High Distinctiveness Condition Assessment Score

Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)

## Scrub Condition Assessment Score

Table C.7 Scrub Condition Assessment

		Enhanced scrub 10
A	<p>The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range).<sup>1</sup></p> <ul style="list-style-type: none"> <li>- At least 80% of scrub is native,</li> <li>- There are at least three native woody species<sup>2</sup>,</li> <li>- No single species comprises more than 75% of the cover (except hazel <i>Corylus avellana</i>, common juniper <i>Juniperus communis</i>, sea buckthorn <i>Hippophae rhamnoides</i> or box <i>Buxus sempervirens</i>, which can be up to 100% cover).</li> </ul>	Y
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran <sup>3</sup> ) shrubs are all present.	Y
C	There is an absence of invasive non-native plant species <sup>4</sup> (as listed on Schedule 9 of WCA5) and species indicative of suboptimal condition <sup>6</sup> make up less than 5% of ground cover.	Y
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	Y
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Y
Total		5

Table C.8 Scrub Condition Assessment score

Condition Assessment Result (out of 5 criteria)	Condition Assessment Score
Passes 5 criteria	Good (3)
Passes 3 or 4 criteria	Moderate (2)
Passes 2 or fewer criteria	Poor (1)

**Urban - Artificial unvegetated, unsealed surface**

No assessment is required for this habitat as the condition is fixed within the SBM as N/A.

**Urban - Developed Land; Sealed Surface**

No assessment is required for this habitat as the condition is fixed within the SBM as N/A.

## APPENDIX D RELEVANT LEGISLATION AND POLICY

### D.1 LEGISLATION

The BNGA has been compiled with reference to the following relevant nature conservation legislation, planning policy and the UK Biodiversity Framework from which the protection of sites, habitats and species is derived in England including:

- UK Government's 25 Year Environment Plan (Defra, 2018);
- Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services (DEFRA, 2011);
- National Planning Policy Framework (NPPF) (MHCLG, 2024)<sup>23</sup>;
- The Natural Environment and Rural Communities (NERC) Act (HMSO, 2006);
- The Environment Act (Defra, 2021); and
- Copeland Local Plan 2021-2039 (Copeland Borough Council 2024)<sup>20</sup>;

#### The Environment Act, 2021

Under the Environment Act, 2021, as of 12th February 2024 and 2nd April 2024, it is mandatory in England for new developments (with a small number of exceptions) to deliver a minimum 10% biodiversity net gain (BNG), as measured by the Statutory Biodiversity Metric or Small Sites Metric (SSM) respectively, secured through planning condition as standard (as per schedule 14 of the Act). Approach to the delivery of BNG must follow the mitigation hierarchy, with avoidance of impact and on-site compensation/gains prioritised, ahead of the use of off-site compensation, or the purchase of statutory credits.

The Act introduces the condition that no development may begin unless a Biodiversity Gain Plan (BGP) has been submitted and approved by the LPA.

The Act also amends requirements of the NERC Act, 2006, adding the need to not just conserve, but enhance biodiversity through planning projects. Furthermore, it introduces the need for the LPA to have regard to relevant local nature recovery strategies and relevant species/protected site conservation strategies, when making their decision.

Under the Act, the enhancements must be maintained for at least 30 years.

### D.2 PLANNING POLICY

#### National

##### National Planning Policy Framework

The National Planning Policy Framework (NPPF) 2024<sup>23</sup> sets out the Government's planning policies for England, including how plans and decisions are expected to apply a presumption in favour of sustainable development. Chapter 15 of the NPPF focuses on conservation and enhancement of the

natural environment, stating plans should ‘identify and pursue opportunities for securing measurable net gains for biodiversity’.

It goes on to state: ‘if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused’. Alongside this, it acknowledges that planning should be refused where irreplaceable habitats such as ancient woodland are lost.

## Regional

### Copeland Local Plan<sup>20</sup>

#### *Policy DS7: Sustainable Drainage*

New development must incorporate Sustainable Drainage Systems unless it can be demonstrated that this is not appropriate. Drainage systems should be well designed with consideration given to the additional benefits they can provide as spaces for landscape, biodiversity and recreation.

Development on greenfield sites should seek to achieve pre-development or better levels of surface water run-off and on previously developed sites, a reduction in surface water discharge should be sought. In demonstrating a reduction clear evidence of existing connections from the site and associated rates of discharge calculations should be provided. In both cases, measures should be put in place to prevent pollution entering watercourses with surface water managed at source. Where identified on the local validation list applicants should submit a Drainage Strategy that shows how foul and surface water will be effectively managed and maintained. Where SuDS are being incorporated details of their long-term management should be provided. This will be secured through the use of s106 agreements. Surface water should be discharged in the following order of priority:

1. To a suitable soakaway or some other form of infiltration system
2. An attenuated discharge to a surface water body such as a watercourse giving full consideration to the catchment and sub-catchments
3. An attenuated discharge to a public surface water sewer, highway drain or another discharge system where there is clear evidence, to the satisfaction of the Council, that alternative preferred options are not available
4. An attenuated discharge to a public combined sewer where there is clear evidence, to the satisfaction of the Council, that alternative preferred options are not available

#### *Strategic Policy T1: Tourism Development*

The Local Plan will support the creation, enhancement and expansion of tourist attractions, new build visitor accommodation and infrastructure in locations consistent with the settlement hierarchy. All tourism development must be of an appropriate scale, located where the environment and infrastructure can accommodate the visitor impact, and where it does not result in unacceptable harm to environmental assets (including landscapes, heritage assets and biodiversity) or the character of the area. Proposals for tourism development outside of defined settlements will be supported where:

- The proposal is for a specific activity or function that requires such a location; or
- The proposal enhances Copeland's existing place bound assets; or
- The proposal is for the change of use, or diversification of an existing building, to provide overnight or longer stay visitor accommodation; or
- The proposal is for a farm diversification scheme in a rural area that will provide or enhance tourist provision.

### *Policy T2: Tourism Development along the Developed Coast*

Opportunities for tourist development in close proximity to the coastline (with the exception of areas designated as undeveloped coast) of an appropriate type and scale will be supported in principle where the proposal:

- a) Provides improved accessibility to the coastal walkways and cycle routes; or
- b) Improves the quality and range of holiday accommodation including overnight tourist provision; or
- c) Creates or enhances gateways and/or hubs; or
- d) Enhances the offer for both onshore and offshore visitors at Whitehaven Harbour including provision for the docking of cruise ships; or
- e) Provides opportunities to enhance the tourism offer in South Copeland.

In all circumstances development should be of an appropriate scale located where the environment and infrastructure can accommodate the visitor impact, and where it does not result in unacceptable harm to environmental assets including landscapes, heritage assets, and biodiversity. All development should ensure local landscape character is maintained and avoid detrimental impacts on setting of Heritage Coast.

### *Strategic Policy N1: Conserving and Enhancing Biodiversity and Geodiversity*

The Council is committed to conserving Copeland's biodiversity and geodiversity including protected species and habitats.

Potential harmful impacts of any development upon biodiversity and geodiversity must be identified and considered at the earliest stage

Proposals must demonstrate, to the satisfaction of the Council, that the following mitigation hierarchy must have been undertaken:

Avoidance – Biodiversity and geodiversity must be considered when drafting up proposals and any potential harmful effects on biodiversity and geodiversity must be identified along with appropriate measures that will be taken to avoid these effects.

Mitigation – Where harmful effects cannot be avoided, they must be appropriately mitigated in order to overcome or reduce negative impacts.

Compensation – Where mitigation is not possible or viable or in cases where residual harm would remain following mitigation, harmful effects should be compensated for. Where this is in the form of

compensatory habitat an area of equivalent or greater biodiversity value should be provided. Compensation is a last resort and will only be accepted in exceptional circumstances.

Where harm remains to a National Site Network, Ramsar site, or functionally linked land, or Site of Special Scientific Interest, development will only be approved where it can be demonstrated that there are imperative reasons of overriding public interest. In such cases, compensatory measures must ensure the overall coherence of the network of European or National Sites as a whole is protected.

Planning permission will be refused for any development if significant harm cannot be avoided, mitigated or compensated for.

A Construction Environmental Management Plan should be submitted where appropriate and sustainable construction methods must be used where possible.

Development proposals where the principal objective is to conserve or enhance biodiversity and geodiversity interests will be supported in principle.

### *Strategic Policy N2: Local Nature Recovery Networks*

The Council will support the identification, implementation, protection and enhancement of Local Nature Recovery Networks that provide important linkages for wildlife within Copeland and beyond. Development which protects or enhances Local Nature Recovery Networks will be supported in principle.

### *Strategic Policy N3: Biodiversity Net Gain*

All development, with the exception of that listed in the Environment Act 2021 and any documents which may supersede it must provide at least 10% biodiversity net gain over and above existing site levels, following the application of the mitigation hierarchy set out in Policy N1 above. This is in addition to any compensatory habitat provided under Policy N1.

Net gain should be delivered on-site where possible. Where on-site provision cannot be achieved in full, the remaining provision must be made elsewhere. This should be provided in order of the following preference:

1. Off-site in an area identified as a Local Nature Recovery Network in the Plan area;
2. Off-site on an alternative suitable site within Cumberland ;
3. Off-site on an alternative suitable site;
4. Through the purchase of off-site biodiversity units on the market;
5. Through the purchase of an appropriate amount of national biodiversity credits.

Sites where net gain is provided (on or off-site) must be managed and monitored by the landowner for a minimum period of 30 years. Where appropriate applicants should supply a Habitat Creation Plan and a Habitat Management and Monitoring Plan (HMMP). Monitoring reports detailing the site's condition post-enhancement must be submitted to the Council each year over this period.

Where there is evidence of deliberate neglect or damage to any of the habitats on development sites in order to reduce its biodiversity value the biodiversity predevelopment value of the on-site habitat will be

---

calculated as the biodiversity value of the habitat on the date immediately before the degradation took place.

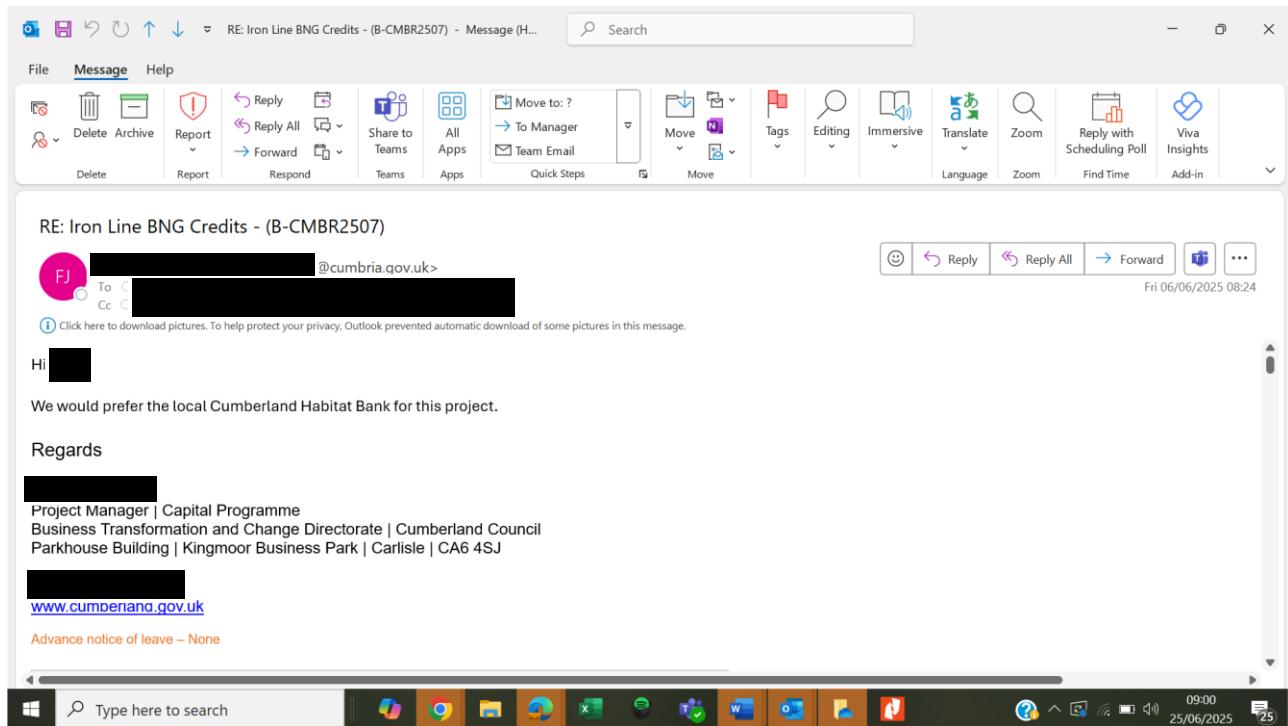
#### *Strategic Policy N8: The Undeveloped Coast*

The Council will ensure that the landscape character of the undeveloped coast is maintained by conserving the intrinsic qualities, natural beauty and open character of the undeveloped coast from inappropriate development. Inappropriate development includes that which affects views within or towards/from the St Bees and Whitehaven Heritage Coast. The following types of development will however be supported:

- Development which supports the management of the undeveloped coast for biodiversity;
- Development which provides or improves safe access to and interpretation of the undeveloped coast for residents and visitors such as appropriate fencing, signage and interpretation boards;
- Energy generating developments that require a coastal location along the undeveloped coast, provided that the potential impacts on biodiversity, landscape and heritage assets are carefully assessed against the benefits. Where negative impacts are likely these must be mitigated against and compensated for.

## APPENDIX E CORRESPONDANCE WITH HABITAT BANK

Figure E.1 Correspondence with the Habitat Bank



The screenshot shows an Outlook email window with the following details:

- Subject:** RE: Iron Line BNG Credits - (B-CMBR2507)
- To:** [REDACTED] @cumbria.gov.uk>
- From:** FJ [REDACTED]
- Date:** Fri 06/06/2025 08:24
- Message Content:**

Hi [REDACTED]

We would prefer the local Cumberland Habitat Bank for this project.

Regards

[REDACTED]

Project Manager | Capital Programme  
Business Transformation and Change Directorate | Cumberland Council  
Parkhouse Building | Kingmoor Business Park | Carlisle | CA6 4SJ

[REDACTED]

[www.cumberlano.gov.uk](http://www.cumberlano.gov.uk)

Advance notice of leave – None
- Toolbar:** Includes standard Outlook icons for Delete, Archive, Report, Reply, Reply All, Forward, Share to Teams, All Apps, Team Email, Move to, To Manager, Move, Tags, Editing, Immersive, Translate, Zoom, Reply with Scheduling Poll, and Viva Insights.
- Taskbar:** Shows the Windows taskbar with various pinned icons (File Explorer, Edge, Mail, etc.) and the date/time (09:00, 25/06/2025).

## REFERENCES

<sup>1</sup> Appletons (2021) Preliminary Ecological Appraisal (PEA). Hodbarrow Nature Reserve for Copeland Borough Council. Ref. 2363-E1-SUM.

<sup>2</sup> Appletons (2022) Addendum Preliminary Ecological Appraisal (PEA) of Alternative Car Park Site. Hodbarrow Nature Reserve for Copeland Borough Council.

<sup>3</sup> Greengage Environmental Ltd (2023) Phase 2 Survey Report Iron Line ref: 551959ltJun23FV02\_Phase2Surveys

<sup>4</sup> Greengage (2025) Ecological Impact Assessment (EIA) Millom Iron Line ref: 553023cp09Apr25FV01\_EIA

<sup>5</sup> Greengage Environmental Ltd (2023) Phase 2 Survey Report Iron Line ref: 551959ltJun23FV02\_Phase2Surveys

<sup>6</sup> Appletons (2021) Preliminary Ecological Appraisal (PEA). Hodbarrow Nature Reserve for Copeland Borough Council. Ref. 2363-E1-SUM.

<sup>7</sup> Appletons (2022) Addendum Preliminary Ecological Appraisal (PEA) of Alternative Car Park Site. Hodbarrow Nature Reserve for Copeland Borough Council.

<sup>8</sup> UKHab Ltd (2023). UK Habitat Classification Version 2.0 (at <https://www.ukhab.org>).

<sup>9</sup> CIEEM (2017); Guidelines for Preliminary Ecological Appraisal, 2<sup>nd</sup> Edition. Chartered Institute of Ecology and Environmental Management, Winchester.

<sup>10</sup> BSI (2013); British Standard 42020:2013: Biodiversity – Code of practice for planning and development, BSI Standards Publication

<sup>11</sup> Department for Environment Food and Rural Affairs (2024) The Statutory Biodiversity Metric User Guide. Available at: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides#:~:text=The%20statutory%20biodiversity%20metric%20tool,the%20statutory%20biodiversity%20metric%20tool>

<sup>12</sup> Appletons (2021) Preliminary Ecological Appraisal (PEA). Hodbarrow Nature Reserve for Copeland Borough Council. Ref. 2363-E1-SUM.

<sup>13</sup> Appletons (2022) Addendum Preliminary Ecological Appraisal (PEA) of Alternative Car Park Site. Hodbarrow Nature Reserve for Copeland Borough Council.

<sup>14</sup> Styles Ecology Ltd (2025) Updated Botanical Survey Report Land at RSPB Hodbarrow, Millom, Cumbria June 2025

<sup>15</sup> UKTAG (UK Technical Advisory Group). (2003). Guidance on Typology for Lakes for the UK. Water Directive Framework.

<sup>16</sup> EEA (European Environment Agency). (2019). EUNIS Habitat Classification. Available at: <https://www.eea.europa.eu/data-and-maps/data/eunis-habitat-classification>

<sup>17</sup> JNCC (Joint Nature Conservation Committee) Annex I Habitat Types (2019) Available at: <https://sac.jncc.gov.uk/habitat/>

<sup>18</sup> Cumbria Habitat Map and Habitat Network Maps: User Guide Habitat Basemap

<sup>19</sup> Cumbria County Council (2021) Statement of Biodiversity Priorities for the Cumbria Local Nature Recovery Strategy Pilot (ref: <https://cumbria.gov.uk/elibrary/Content/Internet/538/18033/44455103252.pdf>)

<sup>20</sup> Cumberland Council (2024) Copeland, Local Plan 2021-2039

<sup>21</sup> GOV.UK (2023) Make on-site biodiversity gains as a developer <https://www.gov.uk/guidance/make-on-site-biodiversity-gains-as-a-developer>

<sup>22</sup> Defra (2022) <https://www.gov.uk/guidance/prevent-the-spread-of-harmful-invasive-and-non-native-plants>

<sup>23</sup> GOV.UK. (2024). National Planning Policy Framework. [online] Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>