

Biodiversity Net Gain Design Stage Report

April 2024

**Land South of Ashford
Road, Sellindge**

Prepared by
CSA Environmental

On behalf of
Gladman Developments

Report No: CSA/4509/16

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1.0 INTRODUCTION

- 1.1 This report has been prepared by CSA Environmental on behalf of Gladman Developments. It sets out the findings of a Biodiversity Net Gain (BNG) Assessment and demonstrates how biodiversity net gain will be achieved alongside proposed development at Land South of Ashford Road, Sellindge (hereafter 'the Site'). Outline planning permission is sought for up to 55 residential dwellings and associated landscaping, public open space, sustainable urban drainage and access.
- 1.2 The Site occupies an area of c. 2.95ha and is located around central grid reference TR 09907 38224, to the east of Sellindge. It consists of agricultural fields (pasture), bordered by hedgerows, lines of trees and scattered trees. There is part of a pond (P1) located centrally on-Site. Land associated with 'Grove House' (i.e., the house and garden), lies within the centre-east of the Site and this is not part of the application Site. Hedgerows H7, H8 and H11 are also considered to be off-Site.
- 1.3 Calculation of biodiversity net gain units has been undertaken using The Statutory Biodiversity Metric, and follows guidance set out within the Biodiversity Net Gain: Good Practice Principles for Development (Baker *et al.*, 2019).
- 1.4 This BNG Assessment aims to:
 - Provide baseline data to classify the type, distinctiveness, condition, connectivity and strategic significance of habitats present prior to and post- development.
 - Ensure that baseline habitat conditions are classified in a robust and consistent manner, and that classification is based on the best data available data at the time of assessment.
 - Clearly identify data collection methods and any limitations.
 - Calculate baseline pre- and post-development habitat units and hedgerows units for the Site based on current development proposals.
 - Propose a Biodiversity Net Gain design with the aim of maximising biodiversity net gain through habitat creation, enhancement and succession.
 - Aim to achieve BNG on-Site wherever possible; with off-site measures being considered as an alternative option if required.
- 1.5 Habitats created or enhanced as part of the proposed development will be subject to ongoing appropriate management and monitoring to ensure that they reach the allocated target condition within the required timeframe. All habitats (retained, enhanced or created) post-development will be maintained for a period of 30 years, in line with

requirements of the Environment Act 2021. Management and monitoring will either be undertaken or funded by the Applicant (or their appointed contractor).

- 1.6 This BNG Design Stage Report has been prepared with reference to the CIEEM guidelines (2021).

2.0 PLANNING POLICY AND LEGISLATION

2.1 The following legislation brings into force Schedule 14 of the Environment Act (2021), making Biodiversity Net Gain (BNG) a condition of planning permission in England from 12 February 2024.

- The Biodiversity Gain (Town and Country Planning) (Consequential Amendments) Regulations 2024
- The Biodiversity Gain Site Register (Financial Penalties and Fees) Regulations 2024
- The Biodiversity Gain Site Register Regulations 2024
- The Biodiversity Gain Requirements (Exemptions) Regulations 2024
- The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024
- The Biodiversity Gain (Town and Country Planning) (Modifications and Amendments) (England) Regulations 2024

2.2 The National Planning Policy Framework (2024) (NPPF) sets out existing government planning policies for England and how they should be applied. Chapter 15: Conserving and Enhancing the Natural Environment, paragraph 180, states that the planning system and planning policies should minimise impacts on and provide net gains for biodiversity.

2.3 Accompanying the NPPF, central government guidance on the implementation of planning policies is set out within online Planning Practice Guidance (PPG). That relating to the protection and enhancement of the Natural Environment was most recently updated in August 2021. The Natural Environment PPG addresses principles across a broad spectrum of topics targeting biodiversity conservation, from individual site and species protection through to the supporting of ecosystem services, and the use of local ecological networks to support the national Nature Recovery Network. In particular the PPG promotes the delivery of measurable biodiversity net gain through the creation and enhancement of habitats alongside development.

2.4 The following policy from the Folkestone & Hythe District Council Core Strategy Review (adopted March 2022) makes reference to biodiversity and the protection and enhancement of priority habitats and species:

Policy CSD4: Green Infrastructure of Natural Networks, Open Spaces and Recreation

'The council will require development proposals over their lifetime:

- To provide net gains in biodiversity at least to comply with statutory and/or national policy requirements (assuming no residual loss); ...'*

3.0 BIODIVERSITY NET GAIN: GOOD PRACTICE PRINCIPLES

Biodiversity Net Gain

- 3.1 Biodiversity net gain has been defined as 'development that leaves biodiversity in a better state than before, and an approach where developers work with local governments, wildlife groups, landowners and other stakeholders in order to support their priorities for nature conservation' (Baker, 2016).

Good Practice Principles

- 3.2 Good practice principles for biodiversity net gain are set out within Table 1.1 of Biodiversity Net Gain: Good practice principles for development (Baker *et al.*, 2019). Key principles include:

- Apply the 'Mitigation Hierarchy' (in line with CIEEM Guidelines for Ecological Impact Assessment (EcIA) (CIEEM, 2018) and be 'additional' by achieving outcomes that exceed existing obligations.
- Avoid losing biodiversity which cannot be off-set elsewhere (e.g. irreplaceable habitats).
- Address risk (e.g. difficulty of achieving habitat creation/enhancement for net gain).
- Make a 'measurable' net gain contribution (e.g. calculated using an appropriate metric) and ensure that calculations consistent and transparent (i.e. limitations and assumptions are clearly identified).
- Ensure that net gain design achieves the best outcome for biodiversity (this may require both quantitative and qualitative assessment) and create a net gain legacy for long-term benefits.

- 3.3 Each of these key principles, and how they have been addressed alongside development, is laid out in turn within Appendix D.

4.0 METHODS

Desk Study

- 4.1 In order to inform an assessment of the habitat types, condition and strategic significance a desk study was undertaken. This comprised a review of the following:
- The Folkestone and Hythe Core Strategy Review (2022) and interactive policies map - to identify Biodiversity Opportunity Areas (BOAs).
 - Multi-Agency Geographic Information for the Countryside (MAGIC) online database (June 2023) - to identify statutory nature conservation designations and Network Enhancement Zones.
 - Data search response from Kent Biodiversity Records Centre (July 2022) - to identify non-statutory nature conservation designations.
- 4.2 Relevant desk study data are presented (where copy write allows) in the EclA (CSA/4509/06) and associated technical appendices.

Habitat Survey

- 4.3 A visit was made to the Site on 17 February 2023 to update the habitat classification survey data, and 22 May 2023 to reclassify habitat condition where necessary. A BNG Baseline Habitats Plan (CSA/4509/107/A) is provided in Appendix A. The habitat classification was undertaken by Jeff Turton ACIEEM (FISC Level 3).
- 4.4 The assessment of 'habitat condition' undertaken on 22 May 2023 by Kate Wolstenholme ACIEEM (FISC Level 4), in line with Metric 4.0 criteria. The completed Habitat Condition Assessment survey sheets are provided in Appendix B. These recorded habitats and conditions have been carried through to The Statutory Biodiversity Metric supporting this report.

Condition Assessment

- 4.5 Habitat condition was assigned following guidance from the 'Technical Supplement' document (Natural England, 2023) which accompanies the Biodiversity Metric 4.0, the prevailing metric at the time of the survey. Assessment criteria were followed for each broad habitat type, to determine the condition of each habitat present. An update condition assessment was not undertaken prior to updating the metric calculations, as presented herein, but key changes between v4.0 and the Statutory Metric were considered retrospectively.

Calculation of Biodiversity Units

- 4.6 The Statutory Biodiversity Metric was used to calculate the change in biodiversity units (including habitat units and hedgerow units) and the overall percentage of gain/loss achieved. Metric calculations have been reviewed by Clare Caudwell CEcol MCIEEM who has completed the 'Calculating and Using Biodiversity Units with Metric 2.0 CIEEM Training Course' (December, 2019) and who has reviewed numerous net gain assessments using each release of the Biodiversity Metric since v2.0.
- 4.7 Pre-development baseline and proposed habitat areas were measured as distinct habitat parcels. Habitat parcels were measured using habitat mapping and aerial imagery overlain in QGIS.
- 4.8 The pre-development habitat areas baseline was calculated using measurements taken from the BNG Baseline Habitats Plan (CSA/4509/107/A; Appendix A) and aerial photography where appropriate. Hedgerows and tree lines were included as linear habitats only (as per the Metric requirements).
- 4.9 Post-development habitats were calculated by measuring the Development Framework Plan prepared by CSA Environmental (CSA/4509/122/D) on behalf of Gladman Developments, allowing areas of retained, created and enhanced habitat to be identified. This plan demonstrates what level of habitat creation and enhancement could be achieved alongside the proposed development.
- 4.10 Habitat condition for both retained and created habitats was assigned taking a precautionary approach and with consideration of biotic and operational phase conditions (i.e. those which may limit the extent to which 'good' condition is likely to be reached).
- 4.11 A full copy of the Statutory Biodiversity Metric calculator should be read in conjunction with this report and is available upon request.

Strategic Significance

- 4.12 This criterion within the Biodiversity Metric was assessed by determining if habitat areas within the Site occur within any strategic locations for biodiversity, form part of a designated site for nature conservation, are identified within local plans for example as Biodiversity Opportunity Areas¹ (BOAs) or are within Ecological Networks and/or Natura conservation designations.
- 4.13 The Application Site does not fall within any strategic locations for biodiversity, neither does it connect to any National Habitat Network zones. Therefore, the strategic significance of the habitats on Site has

¹ BOAs are regional priority areas of opportunity for restoration and creation of Biodiversity Action Plan (BAP) habitats and are a spatial representation of the BAP targets and area.

been categorised as 'Area/compensation not in local strategy/ no local strategy' within the Metric.

Trading Summary

- 4.14 'Trading Up' is a concept which requires 'conserving through offset components of biodiversity that are of a higher conservation priority (for example because they are more irreplaceable and vulnerable) than those affected by the development project for which the offset is envisaged' (BBOP, 2018). For example, should non-irreplaceable habitats be lost / impacted as a result of proposed development, offsets should be achieved through the creation / enhancement of habitat of the same or higher distinctiveness, where environmental conditions are appropriate and where it generates the greatest benefits for biodiversity. Trading issues were considered during the design stage.

Assumptions and Limitations

- 4.15 It should be noted that the accuracy of habitat area measurement is limited by the form of baseline data collection and resolution of development proposal plans. In this instance baseline habitat areas have been calculated by cross referencing survey generated Habitats Plans with aerial imagery and topographical maps included within the Arboricultural Impact Assessment (AIA, CSA/4509/14) and with the tree survey plan, to provide the most accurate representation of on-Site habitats following management activities, i.e. baseline habitats. Post-development habitat areas have been measured from the Development Framework Plan prepared (CSA/4509/122/D). In the absence of detailed planting plans, reasonable assumptions have been made with regards to the type and condition of habitats that could be created.
- 4.16 Trees on Site were cross-checked with details recorded in the AIA to see what size category they fell in to. Trees with a diameter at breast height (DBH) of less than 7.5cm were discounted from the calculations, as these are not considered to be of a significant size, as per the User Guide (2024).
- 4.17 The assessment assumes that habitats created or enhanced as part of the Proposed Development will be subject to ongoing appropriate management to ensure that they reach the allocated target condition within the required timeframe. It is assumed that all habitats (retained, enhanced or created) post-development will be maintained for a period of 30 years, in line with requirements of the Environment Act 2021. Management will either be undertaken or funded by the Applicant (or their appointed contractor), details of which will be provided at the detailed planning stage.

- 4.18 The following outlines the reasonable assumptions made regarding habitat type and condition, in absence of detailed plans.
- 4.19 Areas of grassland alongside the development, road networks and on recreational routes/footpaths have been assigned as 'modified grassland' in 'poor' condition, based on the assumption that these areas will have to be kept short enough for driving visibility and pedestrian use.
- 4.20 The SuDS basin has been assigned 'sustainable drainage system' in 'good' condition, as it is considered that a basin of the size indicated could achieve the habitat condition criteria required through favourable management and good implementation.
- 4.21 Areas of wildflower planting throughout the Site have been assigned 'other neutral grassland' in 'moderate' condition on the assumption that these areas will receive little disturbance and/or can could be seeded and managed to achieve a relatively diverse sward.
- 4.22 Tree planting with the development and the areas of POS have been assigned 'small' 'urban tree' in 'poor' condition, as it is considered unlikely that the average planted street tree will achieve a higher size or condition than this.
- 4.23 The road network has been assigned 'developed land; sealed surface'. The area assigned for housing has been split at a ratio of 70:30. Housing, categorised as 'developed land, sealed surface' accounts for 70% of this area, while residential gardens 'vegetated garden' account for 30%. The play area has been defined as 'Artificial, unsealed surface' as this accounts for a range of suitable permeable soft surfaces. This has been assumed at this point and may change at the Reserved Matters stage. None of these habitat types require a condition score within the BNG metric
- 4.24 Full justification for the habitat types selected (baseline and proposed) are detailed herein.

5.0 BASELINE CONDITIONS

Existing Habitats

- 5.1 The baseline habitat types and conditions below have been informed by the site survey (updated Ecological Walkover and HCA) undertaken in February and May 2023, and are illustrated on the BNG Baseline Habitats Plan (CSA/4509/107/A; Appendix A).

Grassland

- 5.2 The grassland around 'Grove House' consists of grazed pasture of differing condition and classification and has been split here in to F1, F2.1 and F2.2 (see Appendix A) as described below.

Other Lowland Acid Grassland (g1d) with Tall Herb (16) and Grazing (58)

F1

- 5.3 The land to the west of Grove House is atop a gently graded slope which rises to the south. The grassland is interspersed with scattered mature trees but is otherwise open and exposed. At the time of the survey the Site was subject to light grazing by sheep, but the sward had grown to a height of c. 30cm tall in places. The most abundant grass species within this habitat are common bent *Agrostis capillaris*, sheep's fescue *Festuca ovina* and Yorkshire fog *Holcus lanatus*. Sweet vernal grass *Anthoxanthum odoratum* and perennial rye *Lolium perenne* are also found frequently across the sward. Common sorrel *Rumex acetosa*, field woodrush *Luzula campestris*, common mouse-ear *Cerastium fontanum* and common nettle *Urtica dioica* are found occasionally to rarely. The lack of forb species is notable. Bird's-foot-trefoil *Lotus corniculatus* and bulbous buttercup *Ranunculus bulbosus* were found here rarely.

- 5.4 This grassland was assessed against the criteria for 'medium, high and very high' distinctiveness grassland types, as it contains >9 sp/m². It passed four of five applicable criteria in this group. This grassland was assessed to be in 'moderate' condition.

Other Neutral Grassland (g4) with Tall Herb (16) and Grazing (58)

F2.1

- 5.5 The land to the east of Grove house is separated from F2.1 by a gravel driveway leading to Grove House and a narrow access track found to the south of Grove House. This grassland was between c. 30-60cm tall and had become rank in places with previous year's growth. It was ungrazed at the time of the survey but has been grazed in recent years. There were some patchy areas of bare ground and shorter sward, possibly caused by livestock or wild mammals such as rabbits. This grassland has abundant Yorkshire fog, perennial ryegrass and creeping buttercup *Ranunculus repens*, with occasional creeping bent. The sward

here is richer in forbs although not notably so. It contains frequent ragwort *Senecio jacobaea*, common nettle, spear thistle *Cirsium vulgare* and ground ivy *Glechoma hederacea*. Cut-leaved cranesbill *Geranium dissectum* was found rarely.

- 5.6 This grassland passed six out of seven criteria for 'low' distinctiveness grassland, with <9 sp/m² meaning it was not assessed using the medium or high distinctiveness grassland criteria. This grassland was assessed to be in 'moderate' condition.

Other Neutral Grassland (g3c) with Tall Herb (16) and Ruderal / Ephemeral (17)

F2.2

- 5.7 The small strip of land to the south of 'Grove House' forms a narrow corridor of un-grazed vegetation consisting predominantly of tall herbs and other colonising vegetation, with the sward ranging from c. 0.1m – 1m. There are signs of vehicle tracks and compacted ground through the centre of the grassland, creating areas of bare ground. The grassland is overshadowed by the canopy of trees to the north that form part of a line of trees within the off-Site 'Grove House' area. There are few grass species present, although Yorkshire fog and perennial rye were abundant throughout the survey plots. The grassland has abundant pendulous sedge *Carex pendula*, common nettle and burdock *Arctium* sp., with occasional creeping buttercup, broadleaved plantain *Plantago major*, green alkanet *Pentaglottis sempervirens*, and ground ivy.

- 5.8 This grassland was assessed against the criteria for 'medium, high and very high' distinctiveness grassland types, as it contains >9 sp/m². It passed four of six applicable criteria in this group. This grassland was assessed to be in 'poor' condition.

Boundary Features

- 5.9 There are a number of hedgerows and lines of trees that border the Site. Some hedgerows and previously mapped areas of broadleaved woodland have been reclassified since 2019, in line with UKHabs / Metric 4.0 methodology and following an update site visit, and the updated results are described herein. The location of such linear features within the site boundary has also been clarified (as shown on the BNG Baseline Habitats Plan, provided in Appendix A). The condition of each on-Site boundary feature is provided in Table 1 below along with a description, and Appendix B provides a full breakdown of their condition assessments.

Table 1. Descriptions of Linear Features

Boundary Type/ Number	Habitat Type	Description	Condition
Hedgerows			
H3	Native Hedgerow	Dense and frequently managed, c. 1m wide x c. 2m tall with excellent continuity. Beech <i>Fagus sylvatica</i> is the dominate component, with bramble <i>Rubus fruticosus</i> agg. and honeysuckle <i>Lonicera periclymenum</i> frequently encountered along its length, and hawthorn <i>Crataegus monogyna</i> and holly <i>Ilex aquifolium</i> infrequently observed.	Good
H4	Native Hedgerow	Grown out in places, is c. 1m tall and has multiple breaks at least 1m long along its length. Signs of heavy flailing were noted. The main hedge constituent is hawthorn. Sycamore <i>Acer pseudoplatanus</i> and ash <i>Fraxinus excelsior</i> are frequently encountered with one or two elder <i>Sambucus nigra</i> stands occurring.	Poor
H6	Native hedgerow with Trees	A treeline with a low shrub layer (c. 1m) that contains mature and semi-mature trees which include, primarily sycamore and ash, but hybrid black poplar <i>Populus x canadensis</i> and pedunculate oak <i>Quercus robur</i> are present also. The boundary contains intermittent gaps of c. 2m. There is a shrub layer which includes hawthorn alongside ash, elder <i>Sambucus nigra</i> and sycamore.	Poor
H7	Native hedgerow with Trees	A treeline with a shrub layer that contains mature and semi-mature trees which include, primarily sycamore and ash, but hybrid black poplar <i>Populus x canadensis</i> and pedunculate oak are present also. The boundary contains many gaps of at least c. 2m. There is a shrub layer which includes hawthorn alongside ash and sycamore and wych elm <i>Ulmus glabra</i> .	Poor
Treelines			
LT1	Line of Trees	Located off Site on the south of a timber fence but canopies overhang. This line of trees is verge planting in association with the motorway to the south and plays an important role in screening/noise reduction. Species present include: hawthorn, blackthorn <i>Prunus spinosa</i> , ash, sycamore, hazel <i>Corylus avellana</i> , elder, willow <i>Salix</i> sp., silver birch, oak <i>Quercus</i> sp., cherry <i>Prunus avium</i> , beech, holly and English yew <i>Taxus baccata</i> . All trees are of the same age (semi-mature) due to planting.	Moderate

*Hedgerows/treelines considered to be off-Site are not included within the calculations below.

Individual trees

- 5.10 There are a range of scattered trees at the boundaries of the Site compartments which are a mix of ages. There is a collection of scattered trees in the north-east of the Site, near to Grove House.
- 5.11 Some trees (T40, T59, T60, T63 and T71 on the Arboricultural Impact Assessment (AIA) (CSA/4509/14) are lapsed pollard trees and have features associated with veteran trees, such as decayed and hollowed stems, open cavities, exposed surface roots, and dry crevices. Due to their small stem girths none of these trees have been assessed as ancient or veteran but four of the trees (excluding T63) are considered to be 'locally notable'. All of the above trees are common ash and are showing signs of ash dieback disease. This will significantly shorten their lives and the trees will not reach veteran status but will still be of ecological value as standing deadwood.
- 5.12 Two horse chestnuts *Aesculus hippocastanum* (T35 and T36 on the Tree Survey report) are of note due to being two of the largest trees on Site and for their visual amenity and landscape value.
- 5.13 Tree species within this category include: Pedunculate oak, wild cherry *Prunus avium*, ash, copper beech *Fagus sylvatica f. purpurea*, hazel, common beech *Fagus sylvatica*, Swedish whitebeam *Sorbus x intermedia*, hawthorn, crack willow, sweet chestnut, horse chestnut, hornbeam, blackthorn, sycamore and hybrid black poplar.
- 5.14 Scattered trees were assigned as 'rural trees' and all were assessed to be in 'moderate' to 'good' condition depending on whether they were of an advanced age or size.

Ponds

- 5.15 One waterbody is partially on-site (P1), as shown on the BNG Baseline Habitats Plan (Appendix A). The pond was holding water at the time of the Habitat Condition Assessment in May 2023. The pond is heavily shaded by canopy cover with no notable vegetation. This pond has been recorded as dry on other historical surveys, so it is considered likely to dry up each year.
- 5.16 Pond P1 has been assessed as 'ponds (priority habitat)' due to the likelihood of supporting a GCN population known to be in the area. Pond P1 was considered to be in 'poor' condition.

Important Ecological Features

- 5.17 Important ecological features at the Site are discussed within the EclA. In accordance with the BNG Good Practice Principles (see Section 5), their influence on the deliverability of biodiversity net gain has been considered throughout the development of this report and will be

considered through the development of an accompanying Landscape and Ecology Management Plan (LEMP) at the Reserved Matters stage of the application. This will fulfil the requirements of a BNG Management and Monitoring Plan in this instance.

Baseline Calculations

- 5.18 A summary of the baseline habitat types are given in Table 2, along with their Condition, area value and corresponding BNG 'units'.

Table 2. Summary of baseline habitats, condition and biodiversity units

Habitat Type	Condition	Area (ha)	Habitat units
Other lowland acid grassland	Moderate	2.36	18.88
Other neutral grassland	Moderate	0.53	4.24
Other neutral grassland	Poor	0.06	0.24
Ponds (priority)	Poor	0.003	0.02
Rural tree	Good	0.84	10.08
Rural tree	Moderate	0.19	1.52
Total		2.95 ha	24.78
Hedgerow Type	Condition	Length (km)	Hedgerow Units
H1 Native hedgerow	Good	0.13	0.78
H2 Native hedgerow	Poor	0.15	0.30
H3 Native hedgerow with trees	Poor	0.06	0.24
H4 Native hedgerow with trees	Poor	0.17	0.68
LT1 Line of trees	Moderate	0.08	0.32
Total		0.59 km	2.32

*Area measurements attributed to 'rural trees' are not included in the total area as trees are secondary habitat forming a canopy above other primary habitats.

6.0 PROPOSED BNG DESIGN

Habitat Creation and Enhancement

- 6.1 Landscape and biodiversity net gain proposals for the site will see the creation of five habitats, along with the enhancement of existing grassland, hedgerows and tree lines.
- 6.2 Habitat enhancement/creation and target conditions have been assigned taking into consideration the location, usage, and potential management of the habitat area, with full details of these assumptions provided within the Metric.
- 6.3 Areas of enhanced grassland can be protected during the construction phase through the use of Heras fencing to mark out the stand-off area. Enhancement will thereafter be achieved through management interventions to be described in the LEMP/HMMP at the reserved matters stage, but this is likely to entail infrequent mowing to allow seed-set and to create a varied sward height. Management will also ensure cover of bracken is kept at <20% and scrub is at <5%. This will ensure criteria A, B and D of 'medium, high and very high' distinctiveness grassland are met and will give the best chance to meet criterion F. It is expected that criterion E, especially in relation to the absence of invasive non-native plant species (as listed on Schedule 9 of the Wildlife and Countryside Act 1981) will be met as a minimum. Areas of created 'other neutral grassland' will aim to achieve the same target condition through the same management interventions after an initial intensive management period following seeding or turfing.
- 6.4 The proposed biodiversity net gain design will deliver a total of 26.15 habitat units and 4.12 hedgerow units in line with the Landscape Strategy. This will be achieved through habitat enhancement and creation measures, as summarised in Table 4 below.
- 6.5 Areas of habitat creation and enhancement proposed alongside the development of the Site are shown on the Proposed Habitats Plan (CSA/4509/107; Appendix C).

Table 3. On-site habitat creation and enhancement*

Habitat Type	Intervention	Target Condition	Habitat Area (ha)	Habitat Units
Other lowland acid grassland	Enhanced	Good	0.66	7.13
Other neutral grassland (g3c)	Enhanced	Moderate	0.04	0.27
	Enhanced	Good	0.53	5.72
Modified grassland (g4)	Created	Poor	0.17	0.33
Mixed scrub (h3h)	Created	Moderate	0.06	0.40
Developed land; sealed surface (u1b) (buildings)	Created	N/A	0.90	0.00

Developed land; sealed surface (u1b) (road)	Created	N/A	0.03	0.00
Artificial unvegetated; unsealed surface (u1c)	Created	N/A	0.04	0.00
Vegetated garden (231)	Created	N/A	0.39	0.75
Sustainable Urban Drainage System	Created	Good	0.11	0.37
Urban tree	Created	Poor	0.05	0.14
Ponds (priority habitat) (r1)	Enhanced	Moderate	0.003	0.03
Hedgerow Reference / Type	Intervention	Target Condition	Hedgerow length (km)	Hedgerow units
H1 Native Hedgerow with trees (h2)	Enhanced	Good	0.17	1.63
H2 Line of trees (w1g6)	Enhanced	Good	0.08	0.43
H3 Native Hedgerow with trees (h2)	Enhanced	Good	0.06	0.58
H4 Native hedgerow (h2a)	Enhanced	Good	0.15	0.80

*via measures to be described within the HMMP and in line with the time taken to achieve the target condition. Monitoring prescriptions will be outlined in the HMMP also.

Biodiversity Net Gain

- 6.6 Initial calculations indicate that the scheme will result in a -25.25% net loss (equal to -8.83 habitat units) in biodiversity, whilst not yet satisfying the trading rules (off-Site provision is required and is yet to be determined).
- 6.7 The scheme will result in a 77.40% net gain in hedgerows/linear habitat on the site as a whole (gain of 1.80 hedgerow units) through on-Site provision.
- 6.8 A summary of the Biodiversity Metric calculations is provided in Table 5.

Table 5. Quantitative Assessment of Biodiversity Impact

Factor	Habitats (ha)	Hedgerows (km)
Total on-site area / length (baseline)	3.98*	0.59
Total site units (baseline)	34.98	2.32
Area / length retained	0.98	0.13
Units retained	11.00	0.78
Area / length enhanced	1.23	0.44
Baseline units enhanced	9.70	1.50
Area / length lost	1.77	0.02
Units lost	14.28	0.04
Post-intervention units on-site**	26.15	4.12
Net project biodiversity units change	-8.83	1.80
Total project biodiversity % change	-25.25	77.40

**Total habitat area. Site area of 2.95ha excludes area attributed to individual trees.*

***Post-intervention – including habitat retention, creation and enhancement*

Ecological Functionality

- 6.9 A qualitative assessment of Biodiversity Net Gain should also be assessed to ensure that the scheme design delivers the best and most appropriate habitat measures which maintain and enhance ecological functionality of a site and deliver benefits for local biodiversity.
- 6.10 The proposed scheme was designed in liaison with the design team to retain and protect key corridors where possible and create new areas of open space, whilst maintaining viability. The scheme design has been informed by a full suite of habitat and protected species surveys.
- 6.11 A qualitative assessment of the biodiversity impact of the scheme is provided in Table 6.

Table 6. Qualitative Assessment of Biodiversity Impact

Baseline Habitat	Ecological Function	Impact	Post-Development
Other lowland acid grassland	Provides some limited habitat opportunities for local wildlife including reptiles, birds and common invertebrates	The large majority of F1 (c.2.36ha which equates to 80% of the Site area) will be lost to development, whereby the majority will be lost to habitats of very low distinctiveness such as roads and buildings. The newly created areas will also constitute SuDS basins, wildflower road verges and vegetated gardens.	A significant area of this habitat will be lost, however, c. 0.66 ha will be retained and enhanced to 'good' condition and some losses will be partially replaced with mixed scrub and the SuDS basin at the boundaries of the Site. This will increase floral diversity, resulting in increased invertebrate diversity and provide new opportunities for bats, birds, reptiles and mammal species. The SuDS basin will also contain a permanently wet core, which is of value to aquatic wildlife. Modified grassland will also be created across the site peripheries serving as road verges and footpaths, which equates to c. 0.17ha, delivering 0.33 habitat units.
Other neutral grassland	Provides some limited habitat opportunities for local wildlife including reptiles, birds and common invertebrates	The entirety of F2.1 (c. 0.53ha which equates to 18% of the Site area) is of other neutral grassland in 'moderate' condition and is to be enhanced to other neutral grassland in 'good' condition.	The entirety of this habitat will be enhanced from 'moderate' condition other neutral grassland to 'good' condition other neutral grassland through effective management. There will be public access to this area, however, this will be restricted to a mown path, maintaining much of the habitat
		A proportion of F2.2 (c. 0.02ha) will be retained as a 'mown path' through the south of the Site.	This currently unmaintained 'poor' condition area of other neutral grassland will be enhanced at the edges to 'moderate' condition, offering greater opportunity to invertebrate communities.
Hedgerows / Tree Lines	Provide connectivity, foraging and nesting resources for local wildlife (e.g. birds and bats), and commuting corridors for small mammals and reptiles	The majority of hedgerows / habitat connectivity will be retained but there will be a loss of c. 0.02km (equating to 3.5%)	The majority of hedgerow provision will be retained, with a cut-through created in the northern boundary hedgerow (H10) to facilitate Site access, where a small section of native hedgerow will be lost. This will retain on-Site opportunities for a range of fauna. No further hedgerow planting is proposed; however, treelines and hedgerows are to be enhanced where possible. The enhancement of hedgerows and treelines will increase the opportunities for a variety of wildlife including nesting bats, birds, invertebrates and other commuting fauna
Ponds	Provides habitat opportunities for local wildlife including breeding amphibians and invertebrates	The pond is to be retained. Half the pond is off-Site but enhancement will take place of the section on-Site. The pond will be buffered from development. A SuDS basin with a permanently wet core is proposed to be created in the north of the Site.	The pond P1 will be retained and buffered from development effects. A SuDS feature with a permanently wet core is proposed. Ponds/wet features such as these can provide foraging habitat and refuge for a range of species, including bats, birds, amphibians, reptiles and invertebrates.
Individual trees	Provision of foraging, nesting/roosting and habitat connectivity for a range of species	Two medium sized 'good' condition trees and one large size 'moderate' condition tree will be lost to accommodate the development. This amounts to 0.07ha (loss of 6.80%).	A small area of tree habitat will be lost to the proposed development. Urban trees are proposed to be planted through the centre of the Site, and will provide additional habitat connectivity from the north-south for species such as bats and birds

	including bats and birds		
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- 6.12 Ecological functionality will be maintained at the Site through the retention of the vast majority of existing hedgerows, with only minor removal required to facilitate the new access roads, existing gaps in the hedgerows will be utilised where possible (the southern and western Site access). A significant amount of mixed scrub (structural planting) will also be provided within the development area which will improve ecological functionality and connectivity. Creation of other neutral grassland and a SuDS basin will also provide opportunities for a range of species. These measures will offer new resources for a number of species groups, including bats, birds, reptiles, mammals and amphibians.

Trading Summary

- 6.13 In this instance, the 'Trading Summary' indicates that there are losses unaccounted for. Specifically, there is a loss of 'low' and 'medium' distinctiveness habitat (modified grassland and other lowland acid grassland) not being compensated for with units from the same distinctiveness habitat or better (as required within the parameters of the metric). The 'Trading Summary' for 'medium' distinctiveness habitats have been partially offset through the creation of other neutral grassland, mixed scrub and the SuDS basin, however, there is still a significant loss on-Site of habitats of 'medium' distinctiveness. There are further losses of 'medium' distinctiveness habitats on-Site in relation to an individual rural tree. Some of the creation of 'medium' distinctiveness habitats can be attributed toward the loss of areas of 'modified grassland' and 'other lowland acid grassland', however, the total area created on-Site is not enough to fully satisfy the loss. Off-site measures are required, either through a suitable offset site or through the purchase of biodiversity credits through a habitat banking scheme.

Management and Monitoring

- 6.14 Details of long-term management and monitoring for delivery of on-Site habitat units will be provided within a Habitat Monitoring and Management Plan (HMMP), which is best placed to come forward alongside an update to the calculations and reporting undertaken herein and alongside detailed plans. This requirement can be enforced through an appropriately worded planning condition.

Auditing

- 6.15 The scheme, particularly habitats proposed for creation or enhancement, must be subject to monitoring/auditing to ensure targets are met and to identify any early/ongoing intervention needed. As a minimum, the audit shall:
- review the design stage metric with 'as built' calculations
 - review delivery/success of other biodiversity commitments, including those undertaken for species

- review/delivery/success of biodiversity commitments at the end of construction and at the end of a 5-year aftercare period, or in line with the timeframes provided in the LEMP.
- 6.16 Timeframes will be discussed in greater detail once the LEMP is produced. Audits must be carried out by a suitably qualified ecologist and evidence must be provided that all relevant activities from the BNG Design Stage Report / LEMP have been completed.
- 6.17 Habitat monitoring methodology will follow current industry best practice at the time of undertaking and in line with CIEEM guidance.

7.0 CONCLUSIONS

- 7.1 Biodiversity Net Gain calculations, using the Statutory Biodiversity Metric, have been undertaken for the proposed development for Land South of Ashford Road, Sellindge.
- 7.2 Baseline habitat calculations have been informed by UK Habitat Classification survey and subsequent condition assessments.
- 7.3 Post-development calculations have been made based on the Development Framework Plan (CSA/4509/122/D).
- 7.4 Assumptions and limitations to the assessments have been highlighted where relevant and identified within the Metric calculator, which should be reviewed in conjunction with this report.
- 7.5 Through habitat retention, creation and enhancement, the proposed development will result in an overall Site wide **net loss of -8.83 habitat units (-25.25A%) and a net gain of 1.80 hedgerow units (77.40%)**, as shown in Figure 1, below.

FINAL RESULTS		
Total net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	-8.83
	Hedgerow units	1.80
	Watercourse units	0.00
Total net % change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	-25.25%
	Hedgerow units	77.40%
	Watercourse units	0.00%
Trading rules satisfied?		No - Check Trading Summaries ▲

Figure 1. Headline Results from the Statutory Biodiversity Metric calculator.

- 7.6 At present, the proposals for the Site therefore do not fall in line with the requirements of the NPPF and Policy CSD4 of the Folkestone & Hythe Core Strategy Review (2022), which require measurable net gain for biodiversity to be provided alongside new development.
- 7.7 To achieve 10% net gain with the current proposals, a minimum **additional 12.33 habitat units** would need to be delivered, and **all trading errors would need to be satisfied, which may necessitate additional habitat units being secured**. The delivery of sufficient habitat units to achieve 10% net gain is likely to be achieved through off-Site provision, or a combination of on- and off-Site provision; possible measures to achieve this are discussed below.
- 7.8 It should be noted that as a condition of biodiversity net gain, the management of all enhanced/created habitats must be secured for 30 years, to ensure proposals are achieved.

Off-Site compensation

- 7.9 To retain the scheme as presented, sufficient habitat units could be achieved entirely through off-Site provision through the creation of habitats.
- 7.10 For example, the creation of 1.38ha of 'other neutral grassland' in 'good' condition (11.60 habitat units), 0.22ha of 'other neutral grassland' in 'moderate' condition (1.47 habitat units), 0.4ha of mixed scrub in 'good' condition (3.36 habitat units) and 0.20 new trees in 'poor' condition (0.56 habitat units; c. 50 trees) from 2ha of arable cereal cropland (4 habitat units) would deliver +16.99 habitat units, bringing the scheme as a whole to +4.16 habitat units and 11.89% net gain while also satisfying the trading errors for 'low' and 'medium' distinctiveness habitat.
- 7.11 A Habitat Management and Monitoring Plan (HMMP) which would detail how the habitats on site would be managed to achieve their stated goals as part of the BNG calculations would usually be produced alongside a design stage report, but it is our recommendation that these calculations are revisited as part of a Reserved Matters application and a HMMP should be developed at that stage when a more detailed scheme comes forward. This can be secured by an appropriately worded planning condition.

Purchase of Biodiversity Credits

- 7.12 The above habitat units may also be delivered by considering creation or enhancement of other high or medium distinctiveness habitats such as woodland, scrub and grassland types to reach the required level of net gain. Further calculations will need to be run against off-Site net gain as feasible off-set sites are considered. Offset sites may either be sourced through an appropriate broker (e.g. the Environment Bank) or through agreement of a bespoke solution with a third party (e.g. Wildlife Trust / Local Council / private landowner). Provision of off-Site net gain would need to be supported by a baseline assessment of the off-Site land, Biodiversity Metric calculations, Management Plan and legal agreement to secure management and funding for a minimum of a 30 year period.
- 7.13 Alternatively, a government purchasing scheme is due to come forward when BNG becomes mandatory, to enable the purchase of credits to achieve the units required. This is intended as a last resort (DEFRA, 2023).

8.0 REFERENCES

Baker, J., 2016. Biodiversity Net Gain: Good practice principles for development. CIEEM, CIRIA & IEMA.

Baker, J., Hoskin, R., and Butterworth, T., 2019. Biodiversity Net Gain: Good Practice Principles for Development. A practical guide. CIEEM, CIRIA & IEMA.

Butcher, B., Carey, P., Edmonds, R., Norton, L., and Treweek, J., 2020. *The UK Habitat Classification User Manual Version 1.1*. Available at: <http://www.ukhab.org/>

Chartered Institute of Ecology and Environmental Management, 2017. *Guidelines for Ecological Report Writing*. Winchester: CIEEM.

Chartered Institute of Ecology and Environmental Management, 2018. *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1*. Winchester: CIEEM.

Chartered Institute of Ecology and Environmental Management, 2021. *Biodiversity Net Gain Report and Audit Templates*. Winchester, UK.

DEFRA, 2023. *Guidance: Statutory biodiversity credit prices*. [online] Available at: <https://www.gov.uk/guidance/statutory-biodiversity-credit-prices> [Accessed 20/09/2023].

Natural England, 2019. Archive Site for the Biodiversity Metric 2.0, 3.0, 3.1 and the beta test version of the Small Sites Metric. [online] Accessed at: <https://nepubprod.appspot.com/publication/5850908674228224>

Natural England, 2021. Biodiversity metric 3.0: Auditing and accounting for biodiversity – User Guide.

Natural England, 2021. Biodiversity Metric 3.0. Auditing and Accounting for Biodiversity. Technical Supplement. Natural England Joint Publication JP039.

Folkestone & Hythe District Council, 2022. *Core Strategy Review*.

Appendix A

BNG Baseline Habitats Plan
(CSA/4509/107/A)



- Site boundary
- Other lowland acid grassland (g1d)
- Other neutral grassland (g3c)
- Ponds (r)
- Hedgerows with trees (h2) (190)
- Hedgerows (Priority Habitat) (h2a)
- Line of trees (w1g6)
- Individual rural trees
- Field reference
- Hedgerow / treeline reference
- Target notes:
 - TN1 - Veteran / ancient tree (T55)
 - TN2 - Notable sweet chestnut trees (T35 & T36)
 - TN3 - Notable tree with veteran features (T40)
 - TN4 - Notable tree with veteran features (T59)
 - TN5 - Notable tree with veteran features (T60)
 - TN6 - Notable tree with veteran features (T71)

Project	Land South of Ashford Road, Sellindge	Date	September 2023	Drawing No.	CSA/4509/107
Drawing Title	Baseline Habitats Plan	Scale	Refer to scale	Rev	A
Client	Gladman Developments Ltd	Drawn	CVJ	Checked	CC

Appendix B

Habitat Condition Assessment

Condition Sheet: LINE OF TREES Habitat Type			
Habitat Types			
<p>Line of trees</p> <p>Line of trees – associated with bank or ditch</p> <p>Ecologically valuable line of trees</p> <p>Ecologically valuable line of trees – associated with bank or ditch</p> <p><i>Please see the separate Individual trees condition sheet for linear blocks and groups of trees in an <u>urban</u> setting. You should only use this Line of trees condition assessment and record this habitat type in <u>rural</u> locations.</i></p>			
Habitat Description			
See EclA/BNG report			
<p>See the Statutory Biodiversity Metric User Guide.</p> <p>This assessment is based on the Hedgerow Survey Handbook¹. For further clarifications please refer to the Handbook.</p> <p>Where ancient and veteran trees are present within the line of trees, see Footnote 2 for standing advice.</p>			
On-site or off-site, site name and location	Land south of ashford road, sellindge. On Site.	Survey date and Surveyor name	Kate Wolstenholme ACIEEM FISC lvi 4. 22 May 2023
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	LT1
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	At least 70% of trees are native species.	Y	
B	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.	N	
C	One or more trees has veteran features and or natural ecological niches for vertebrates and invertebrates, such as presence of standing and attached deadwood, cavities, ivy or loose bark.	Y	
D	There is an undisturbed naturally-vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other human activities (excluding grazing). Where veteran trees are present, root protection areas should follow standing advice ² .	N	
E	At least 95% of the trees are in a healthy condition (deadwood or veteran features valuable for wildlife are excluded from this). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Y	
Number of criteria passed			3
Condition Assessment Result (out of 5 criteria)	Condition Assessment Score	Score Achieved x/√	
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	X	
Passes 2 or fewer criteria	Poor (1)		
Suggested enhancement interventions to improve condition score			

Condition Sheet: GRASSLAND Habitat Type (medium, high and very high distinctiveness)													
UK Habitat Classification (UKHab) Habitat Types													
Grassland - Lowland calcareous grassland Grassland - Lowland dry acid grassland Grassland - Lowland meadows Grassland - Other lowland acid grassland Grassland - Other neutral grassland Grassland - Tall herb communities (H6430) [Not to be confused with the Tall forbs secondary code – see UKHab guidance for details.] Grassland - Upland acid grassland Grassland - Upland calcareous grassland Grassland - Upland hay meadows Sparsely vegetated land - Calaminarian grassland													
Habitat Description													
ukhab – UK Habitat Classification													
On-site or off-site, site name and location	Land South of Ashford Road, Sellindge	Survey date and Surveyor name		Kate Wolstenholme ACIEEM FISC IVI 4. 22 May 2023									
		Survey reference (if relating to a wider survey)											
Limitations (if applicable)		Habitat parcel reference										Notes (such as justification)	
		F1	F2.1	F2.2									
Condition Assessment Criteria		Grid reference											
		Criterion passed (Yes or No)											
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). ¹ Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	Y	Y	N								F2.2 is formed in majority of ruderal species and few grasses	
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.	Y	Y	Y									
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ² .	Y	Y	Y									
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	Y									
E	Combined cover of species indicative of suboptimal condition ³ 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 ⁴ (as listed on Schedule 9 of WCA ⁵) are present, this criterion is automatically failed.	N	Y	Y									
Additional Criterion - must be assessed for all non-acid grassland types													

F	There are 10 or more vascular plant species per m ² 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.	N/A	N	N									F2.1 contains 9.6 sp/m2 and F2.2 contains 8.3 sp/m2
Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)		N/A	N	N									
Number of criteria passed		4	4	4									
Condition Assessment Result	Condition Assessment Score	Score Achieved x/√											
Acid grassland types (Result out of 5 criteria)													
Passes 5 criteria	Good (3)												
Passes 3 or 4 criteria	Moderate (2)	x											
Passes 2 or fewer criteria	Poor (1)												
Non-acid grassland types (Result out of 6 criteria)													
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)		x										
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)			x									
Suggested enhancement interventions to improve condition score													
Notes													
Footnote 1 - Professional judgement should be used alongside the UKHab description.													
Footnote 2 – For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches not exceeding 5% cover.													
Footnote 3 - Species indicative of suboptimal condition for this habitat type include: creeping thistle <i>Cirsium arvense</i> , spear thistle <i>Cirsium vulgare</i> , curled dock <i>Rumex crispus</i> , broad-leaved dock <i>Rumex obtusifolius</i> , common nettle <i>Urtica dioica</i> , creeping buttercup <i>Ranunculus repens</i> , greater plantain <i>Plantago major</i> , white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i> . There may be additional relevant species local to the region and or site.													
Footnote 4 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, by applying professional judgement.													
Footnote 5 – Wildlife and Countryside Act 1981 (as amended).													

Condition Sheet: POND Habitat Type			
Habitat Type			
Lakes - Ponds (priority habitat) Lakes - Ponds (non-priority habitat) Lakes - Temporary lakes ponds and pools (H3170) [Use this condition sheet for Temporary ponds and pools, use Lake condition sheet for Temporary lakes] Lakes - Ornamental lake or pond [Use this condition sheet for Ornamental ponds, use Lake condition sheet for Ornamental lakes]			
Habitat Description			
See EcIA/BNG			
ukhab – UK Habitat Classification			
On-site or off-site, site name and location	Land south of Ashford Road. On and off site.	Survey date and Surveyor name	Kate Wolstenholme ACIEEM FISC IM 4. 22 May 2023
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference	TR 09985 38206	Habitat parcel reference	P1
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
Core Criteria - applicable to all ponds (woodland ¹ and non-woodland):			
A	The pond is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. Turbidity is acceptable if the pond is grazed by livestock.	N	
B	There is semi-natural habitat (moderate distinctiveness or above) completely surrounding the pond, for at least 10 m from the pond edge for its entire perimeter.	N	
C	Less than 10% of the water surface is covered with duckweed <i>Lemna</i> spp. or filamentous algae.	Y	
D	The pond is not artificially connected to other waterbodies, such as agricultural ditches or artificial pipework.	N	
E	Pond water levels can fluctuate naturally throughout the year. No obvious artificial dams ² , pumps or pipework.	Y	
F	There is an absence of listed non-native plant and animal species ³ .	Y	

G	The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.	Y	
Additional Criteria - must be assessed for all non-woodland ponds:			
H	Emergent, submerged or floating plants (excluding duckweed) ⁴ cover at least 50% of the pond area which is less than 3 m deep.	N	
I	The pond surface is no more than 50% shaded by adjacent trees and scrub.	N	
Number of criteria passed		4	
Condition Assessment Result		Condition Assessment Score	Score Achieved ×/✓
Results for woodland ponds which require assessment of 7 core criteria			
Passes 7 criteria		Good (3)	
Passes 5 or 6 criteria		Moderate (2)	
Passes 4 or fewer criteria		Poor (1)	
Results for non-woodland ponds which require assessment of 9 criteria			
Passes 9 criteria		Good (3)	
Passes 6 to 8 criteria		Moderate (2)	
Passes 5 or fewer criteria		Poor (1)	X
Suggested enhancement interventions to improve condition score			
<p>Footnote 1 - A woodland pond will be surrounded on all sides by woodland habitat.</p> <p>Footnote 2 – This excludes natural dams such as those created by Eurasian beaver <i>Castor fiber</i>.</p> <p>Footnote 3 - Any species included on the Water Framework Directive (WFD) UKTAG GB High Impact Species List should be absent: WFD UKTAG (2021) <i>Classification of aquatic alien species according to their level of impact</i> [online]. Available from:</p>			

Condition Sheet: INDIVIDUAL TREES Habitat Type														
Habitat Type(s)														
<div>Individual trees – Urban trees</div> <div>Individual trees – Rural trees</div> <div>Complete a condition sheet for each tree or block of trees.</div> <div>Please see separate Line of trees condition sheet for a line of Rural trees.</div>														
Habitat Description														
<div>Individual trees (description applied to the urban or rural environment):</div> <div>Young trees over 7.5 cm in diameter at breast height whose canopies are not touching.</div> <div>Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only):</div> <div>Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies must overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.</div>														
Site name and location		Land South of Ashford Road, Sellindge		On-site or off-site		On-Site								
				Survey reference (if relating to a wider survey)										
Limitations (if applicable)				Habitat parcel reference										
				T39	T41	T44	T45	T46	T42	T47	T43	T27	T26	
Condition Assessment Criteria														Notes (such as justification)
				Criterion passed (Yes or No)										
A	The tree is a native species (or at least 70% within the block are native species).	Y	Y	Y	Y	Y	N	N	Y	Y	Y			
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			
C	The tree is mature (or more than 50% within the block are mature).	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y	Y	Y	Y	Y	Y	Y	Y	N	Y			
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y	Y	N	Y	N	Y	Y	N	Y	N			
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			
Number of criteria passed		6	6	5	6	5	5	5	5	5	5			
Condition Assessment Result (out of 6 criteria)		Condition Assessment Score		Score Achieved ×/□										
Passes 5 or 6 criteria		Good (3)		X	X	X	X	X	X	X	X	X		
Passes 3 or 4 criteria		Moderate (2)												
Passes 2 or fewer criteria		Poor (1)												
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.														
Suggested enhancement interventions to improve condition score														
Footnotes														
<div>Footnote 1 - See gov.uk standing advice on ancient and veteran trees. Available from:</div> <div>Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)</div> <div>and:</div> <div>Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)</div>														

Condition Sheet: INDIVIDUAL TREES Habitat Type														
Habitat Type(s)														
<div>Individual trees – Urban trees</div> <div>Individual trees – Rural trees</div> <div>Complete a condition sheet for each tree or block of trees.</div> <div>Please see separate Line of trees condition sheet for a line of Rural trees.</div>														
Habitat Description														
<div>Individual trees (description applied to the urban or rural environment):</div> <div>Young trees over 7.5 cm in diameter at breast height whose canopies are not touching.</div> <div>Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only):</div> <div>Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies must overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.</div>														
Site name and location		Land South of Ashford Road, Sellindge				On-site or off-site		On-Site						
						Survey reference (if relating to a wider survey)								
Limitations (if applicable)		Habitat parcel reference												
		T37	G11	T36	T35	T33	T34	T32	T31	T30	T38			
Condition Assessment Criteria		Criterion passed (Yes or No)											Notes (such as justification)	
A	The tree is a native species (or at least 70% within the block are native species).	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			
C	The tree is mature (or more than 50% within the block are mature).	Y	Y	Y	Y	N	N	Y	Y	Y	Y			
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	Y	Y	Y	N	N	Y	N	Y	Y			
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			
Number of criteria passed		6	6	6	6	6	4	6	5	6	6			
Condition Assessment Result (out of 6 criteria)		Condition Assessment Score		Score Achieved ×/□										
Passes 5 or 6 criteria		Good (3)		X	X	X	X	X		X	X	X		X
Passes 3 or 4 criteria		Moderate (2)							X					
Passes 2 or fewer criteria		Poor (1)												
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.														
Suggested enhancement interventions to improve condition score														
Footnotes														
<div>Footnote 1 - See gov.uk standing advice on ancient and veteran trees. Available from:</div> <div>Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)</div> <div>and:</div> <div>Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)</div>														

Condition Sheet: INDIVIDUAL TREES Habitat Type															
Habitat Type(s)															
<div>Individual trees – Urban trees</div> <div>Individual trees – Rural trees</div> <div>Complete a condition sheet for each tree or block of trees.</div> <div>Please see separate Line of trees condition sheet for a line of Rural trees.</div>															
Habitat Description															
<div>Individual trees (description applied to the urban or rural environment):</div> <div>Young trees over 7.5 cm in diameter at breast height whose canopies are not touching.</div> <div>Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only):</div> <div>Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies must overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.</div>															
Site name and location	Land South of Ashford Road, Sellindge				On-site or off-site	On-Site									
					Survey reference (if relating to a wider survey)										
Limitations (if applicable)					Habitat parcel reference										
					T60	T70	T71	T55	T56	T18	T76	G19	T58	G13	
Condition Assessment Criteria															Notes (such as justification)
					Criterion passed (Yes or No)										
A	The tree is a native species (or at least 70% within the block are native species).				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).				Y	Y	Y	Y	Y	Y	Y	N	Y	Y	
C	The tree is mature (or more than 50% within the block are mature).				Y	Y	Y	Y	Y	Y	Y	N	Y	Y	
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.				Y	Y	N	Y	Y	Y	Y	Y	Y	Y	
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.				N	Y	Y	Y	Y	Y	N	N	Y	Y	
F	More than 20% of the tree canopy area is oversailing vegetation beneath.				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Number of criteria passed					5	6	5	6	6	6	6	4	5	6	6
Condition Assessment Result (out of 6 criteria)	Condition Assessment Score				Score Achieved ×/□										
Passes 5 or 6 criteria	Good (3)				X	X	X	X	X	X		X	X	X	
Passes 3 or 4 criteria	Moderate (2)										X				
Passes 2 or fewer criteria	Poor (1)														
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.															
Suggested enhancement interventions to improve condition score															
Footnotes															
<div>Footnote 1 - See gov.uk standing advice on ancient and veteran trees. Available from:</div> <div>Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)</div> <div>and:</div> <div>Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)</div>															

Condition Sheet: INDIVIDUAL TREES Habitat Type												
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Site name and location		Land South of Ashford Road, Sellindge			On-site or off-site		On-Site					
					Survey reference (if relating to a wider survey)							
Limitations (if applicable)					Habitat parcel reference							
					G12	T48	T49	T50	T51	T52	T53	
Condition Assessment Criteria												Notes (such as justification)
					Criterion passed (Yes or No)							
A	The tree is a native species (or at least 70% within the block are native species).	Y	Y	Y	Y	Y	Y	Y	Y	Y		
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y	Y	Y	Y	Y	Y	Y	Y	Y		
C	The tree is mature (or more than 50% within the block are mature).	Y	Y	Y	Y	Y	Y	Y	N	Y		
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y	Y	Y	Y	Y	Y	Y	Y	Y		
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y	Y	Y	N	N	Y	N	N	Y		
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	N	Y	Y	N	Y	Y	Y	Y	Y		
Number of criteria passed		5	6	6	4	5	6	5	4	6		
Condition Assessment Result (out of 6 criteria)		Condition Assessment Score		Score Achieved ×/□								
Passes 5 or 6 criteria		Good (3)		X	X	X		X	X	X		X
Passes 3 or 4 criteria		Moderate (2)					X					X
Passes 2 or fewer criteria		Poor (1)										
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.												
Suggested enhancement interventions to improve condition score												
Footnotes												
<div>Footnote 1 - See gov.uk standing advice on ancient and veteran trees. Available from:</div> <div>Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)</div> <div>and:</div> <div>Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)</div>												

Appendix C

Proposed Habitats Plan
(CSA/4509/126)



- Site boundary**
- Hedgerows (h2)
 - Hedgerows (Priority Habitat) (h2a)
 - Line of trees (w1g6)
 - Other lowland acid grassland (g1d)
 - Other neutral grassland (g3c)
 - Modified grassland (g4)
 - Mixed scrub (h)
 - Residential development (u)
 - Developed land, sealed surface (u1b)
 - Buildings (u1b5)
 - Sustainable Urban Drainage System (848)
 - Artificial unvegetated unsealed surface (u1c)
 - Pond (priority habitat)
- Trees**
- Existing
 - Newly planted
 - Lost

0 50 100 m

Appendix D

Evidence of Adherence to BNG Best Practice Principles

Table E.1. BNG Principals and how they have been applied.

Apply the 'Mitigation Hierarchy' (in line with CIEEM Guidelines for Ecological Impact Assessment (EcIA) (CIEEM, 2018) and be 'additional' by achieving outcomes that exceed existing obligations.
<p>Existing trees with potential to reach veteran status (irreplaceable habitats) will be buffered from development, with appropriate Root Protection Areas (RPAs) detailed within the Arboricultural Impact Assessment (AIA) carried out for the outline planning application.</p> <p>To further avoid impacts to retained habitats during both the construction and operational phases, tree protection fencing (construction phase), and later post-and-rail fencing (operational phase), will be installed to prevent damage/disturbance.</p> <p>Regarding protected species, in addition to habitat retention and protection where possible in the first instance, measures to avoid impacts as a result of development include seasonal avoidance measures relevant to nesting birds.</p> <p>Measures to mitigate/minimise unavoidable impacts are included, such as measures to reduce the effects of disturbance, fragmentation and/or barriers to dispersal on protected species introduced by the proposed layout, including specific measures addressed within the EcIA. A sensitive lighting scheme (to cover both construction and operation) is proposed to mitigate impacts on bats, and shall be designed and informed by ecological advice. Habitat management detailed within the LEMP/HMMP (to be conditioned) will address measures to minimise disturbance/degradation of retained/enhanced/created habitats (e.g., during the occupational phase of on-site habitats) in the long term. Habitat enhancement measures for retained on-site habitats are proposed wherever possible as a matter of principle, and contribute towards offsetting habitat losses.</p>
Avoid losing biodiversity which cannot be off set elsewhere (e.g., irreplaceable habitats).
There are no irreplaceable habitats on site.
Address risk (e.g., difficulty of achieving habitat creation/enhancement for net gain).
<p>When proposing enhancement of retained on-site habitats, careful consideration of the Condition Assessment data has been undertaken and enhancement is only proposed where it is genuinely considered viable and where the relevant condition assessment criteria can feasibly be addressed through management in order to achieve an enhanced overall condition score.</p> <p>The time required for enhancement/creation of the relevant habitat types to reach their target condition is addressed within the metric used (Metric 4.0), and Habitat Management Plans can be drawn up in accordance with these timeframes as part of the HMMP.</p>
Make a 'measurable' net gain contribution (e.g., calculated using an appropriate metric) and ensure that calculations are consistent and transparent (i.e., limitations and assumptions are clearly identified).
The NE Biodiversity Metric 4.0 calculation tool has been applied to this BNG Assessment and has been supplied separately. Habitat conditions selected (both baseline and proposed) are informed by detailed Condition Assessment surveys following Metric 4.0 methodology. Limitations and assumptions for each habitat parcel, where relevant, are described within Assessor Comments in the calculator tool and discussed herein as appropriate.
Ensure that net gain design achieves the best outcome for biodiversity (this may require both quantitative and qualitative assessment) and create a net gain legacy for long-term benefits.
Measures to achieve overall net gains in biodiversity as a result of the proposals have been designed as appropriate to existing habitats and species and in the context of the local landscape. These include retention and protection of habitats and management in perpetuity of these for the long-term benefit of the species they support. Where a net gain on-Site could not be feasibly achieved under the current design proposals, off-Site measures are recommended, where the offset site will be in the same jurisdiction as the Site in order to maintain its effectiveness for local biodiversity. The habitats created will be of the same or higher distinctiveness as to what has been lost on-Site.

For example, sufficient area/s of habitat types are enhanced/created on-site, to target conditions such to achieve the net gain detailed in this report (quantitative), but furthermore, the long-term management plans for these habitats shall be created with the more qualitative aims of creating/maintaining optimal conditions for the birds, bats and other mammals they support: (avoiding lighting and disturbance; providing additional roosting/nesting opportunities; increasing botanical diversity, and food plants for prey species; greater provision of deadwood and log piles; rotational cutting to maintain structural mosaic).

Areas of habitat retention have been designed in order to maintain the ecological functionality of the Site and include linear features and ecological corridors that maintain connectivity across the Site and within the local landscape, with measures to protect retained habitats from disturbance throughout the development's life cycle. Long-term management and well-considered enhancements will therefore deliver overall benefits for local biodiversity.

A holistic approach has been taken in designing the retention, protection, enhancement, creation, and long-term management and monitoring measures of on-site biodiversity net gains legacies.



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