



Thijs Bax
Kent Planning Consultancy
The Workshop
Rose Cottage Farm
North Street
Biddenden
Ashford
Kent
TN27 8BA

Our Ref: TAP_CPCS_apl_TB230217
Date: 17th February 2023

Thijs,

BIODIVERSITY GAIN STATEMENT
LAND ADJACENT TO No.4 CHALK PIT COTTAGES, GREEN FARM LANE, SHORNE,
GRAVESEND, KENT, DA12 3HN

Please find set out below a Biodiversity Gain Statement in support of the proposed development of this area of currently mostly scrub-covered ground.

The Site is bound to the south by No. 4 Chalk Pit Cottages, to the east by Green Farm Lane, to the north by No.1 Longten's Cottages and to the west by an ill-defined field edge, see *Site Location and Existing Block Plans* Dwg. 4074-001 dated June 2022 by Kent Planning Consultancy.

It is proposed to clear the Site vegetation and construct a single dwelling with off-road parking as shown on *Proposed Block Plan* Dwg. 4074-002 and *Proposed Front Elevation and Street Scene* Dwg. 4074-003 dated June 2022 by Kent Planning Consultancy.

Biodiversity Net Gain

The Site would not be regarded as containing significant ecological value, being dominated by c.73% Bramble *Rubus fruticosus* agg. scrub [JNCC Code **A2.1**], mixed with scattered Elder *Sambucus nigra* and localised Ivy *Hedera helix*. The scrub has developed over what appears to be previous rank Poor Semi-Improved Grassland [JNCC Code **B5**] that contains a high content of tall ruderal species, while in localised places this has developed into Tall Ruderal Vegetation [JNCC Code **C3.1**] – the latter dominated by Nettle *Urtica dioica*, Cow Parsley *Anthriscus sylvestris* and Alexanders *Smyrnium olusatrum*.

Assigning Floristic Species-Richness Values

Scrub – This habitat consists of a very homogeneous stand of Mature Bramble, and is assessed as

having a combined total of just 3 species.

Poor Semi-Improved Grassland – An averaged floristic species-richness for this habitat (as provided by NERC Centre for Ecology and Hydrology Countryside Survey data) assuming the Site vegetation is up to 20 years in age is based on Improved Grassland (analogous to rank Poor Semi-Improved Grassland, or Amenity Grassland) is 10.71 species.

Proposed Biodiversity Gain

Existing and proposed Phase I Habitat Plans are attached at the rear of this Statement.

Hedgerows – New native species-rich hedgerows are proposed to enclose the rear garden, and these will be a minimum of 1m in width (achieved using triple staggered rows of planted whips). The resulting 132.8 sqm of native hedgerow would consist of the following:

- 11 x Trees/Shrubs - Hawthorn, Blackthorn, Hazel, Field Maple, Pedunculate Oak, Dog Rose, Holly, Broom, European Gorse, Spindle and Dogwood.
- Woodland ground flora seed mix [Emorsgate **EH1**] = 26 spp.
- Planting of 100 x Bluebell bulbs and 100 x Wild Daffodil bulbs.

This would result in a native species richness of 39 species.

Scrub Planting – The same hedgerow species mix would be used to establish corner/edge planting within the rear garden and along the boundary edges of the front lawns.

This would result in a native species richness of 39 species.

Wildflower Grassland – A 93.9 sqm area of native wildflower grassland will be created on the at the western end of the Site – to be sown with Emorsgate **EM3** Specialised General Purpose Meadow Seed Mix (which consists of 23 grassland species).

Bat Hibernation Feature – It is proposed to install a single wall-mounted Schwegler 1WQ Bat Box on the western façade of the new dwelling.

Biodiversity Gain Calculations

(i) BREEAM Calculation

Calculation of biodiversity value for Existing Site:

Habitat Type	Area (sqm) Sp.-Richness	Floristic Score	Score
Native Scrub	1305.8	3	3917.4
Poor Semi-Improved Grassland	273.5	10.71	2929.2
Tall Ruderal Vegetation	207.2	3	621.6
Hardstanding	0	0	0
Building	0	0	0
Totals	1786.5		7468.2

$$\text{Biodiversity Score} = 7468.2 / 1786.5 = \mathbf{4.2}$$

Calculation of biodiversity value for Proposed Site:

Habitat Type	Area (sqm) Sp.-Richness	Floristic Score	Score
Native Scrub	0	3	0
Hedgerows (proposed)	132.8	39	5179.2
New Scrub Planting	241.7	39	9426.3
Poor Semi-Improved Grassland	0	10.71	0
Amenity Grassland	1051.2	10.71	11,258.4
Wildflower Grassland	93.9	23	2159.7
Hardstanding	121.3	0	0
Building	145.6	0	0
Totals	1786.5		28,023.6

$$\text{Biodiversity Score} = 28,023.6 / 1786.5 = \mathbf{15.7}$$

The biodiversity gain would be calculated as 15.7 – 4.2, i.e. plus 11.5 and this would be regarded as a Positive Change.

(ii) DEFRA Matrix 3.1 Calculation

The biodiversity gain was assessed using the DEFRA Biodiversity Metric 3.1 (dated 7th July 2021), and this provided a net gain calculation of 14.2%, see attached Appendix 1. This calculation excludes the wall-mounted bat box.

We trust that you will find this appraisal of the net biodiversity gain for this Site acceptable, and understand that it will be submitted as part of the Planning Application.

Yours sincerely,

Ashley Leftwich
Director

FIGURES



Notes	Rev	Date	Description	0102030405060708090100m Scale - 1:1250 0246810m Scale - 1:200 KENT DESIGN STUDIO K D S web - www.kentdesignstudio.co.uk tel - 01580 230413	Project Title Proposed Works at: Land Adjacent to 4 Chalk Pit Cottages, Green Farm Lane, Shorne, Gravesend, DA12 3HN	Description Site Location and Existing Block Plans Drawing Number 4074 - 001 - A Drawn By - AD / NG
Do Not Scale (unless for the purposes of planning). Report all discrepancies, errors and omissions. Verify all dimensions on site before commencing any work on site or preparing shop drawings. All materials, components and workmanship are to comply with the relevant British Standards, Codes of Practice, and appropriate manufacturers recommendations that from time to time shall apply. For all specialist work, see relevant drawings. This drawing is copyright of Kent Design Studio Ltd						



Notes

Do Not Scale (unless for the purposes of planning).
Report all discrepancies, errors and omissions.
Verify all dimensions on site before commencing any work on site or preparing shop drawings.
All materials, components and workmanship are to comply with the relevant British Standards, Codes of Practice, and appropriate manufacturers recommendations that from time to time shall apply.
For all specialist work, see relevant drawings.
This drawing is copyright of Kent Design Studio Ltd

Rev	Date	Description

0

2

4

6

8

10m

Scale - 1:200

 web - www.kentdesignstudio.co.uk tel - 01580 230413	Project Title		Description Proposed Block Plan
	Proposed Works at:		
	Land Adjacent to 4 Chalk Pit Cottages, Green Farm Lane, Shorne, Gravesend, DA12 3HN		
Scale 1:200 @ A1	Date January 2023	Drawing Number 4074 - 004	
PROPOSED		Drawn By - AD / NG	

APPENDICES

Appendix 1

APPENDIX 1 – DEFRA NET GAIN SUMMARY RESULTS

Biodiversity Metric 3.1_Chalk Pit Cottages		
Home Insert Draw Page Layout Formulas Data Review View Cut Copy Paste Format Rockwell Light 11 A A B I U Wrap Text Merge & Centre Date		
B2 $=IF(Start!$F$12="", "", Start!$F$12)$		
Land beside No.4 Chalk Pit Cottages Return to results menu		
Headline Results		
On-site baseline	Habitat units	0.81
	Hedgerow units	0.00
	River units	0.00
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.93
	Hedgerow units	1.04
	River units	0.00
On-site net % change (Including habitat retention, creation & enhancement)	Habitat units	14.29%
	Hedgerow units	0.00%
	River units	0.00%
Off-site baseline	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.12
	Hedgerow units	1.04
	River units	0.00
Total on-site net % change plus off-site surplus (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	14.29%
	Hedgerow units	100.00%
	River units	0.00%

PHOTOGRAPHS

PHOTOGRAPHS



Looking west from SE corner



Looking SW from NE corner



Looking west from NE corner