ARCHITECT INFORMATION: BNG ANSWERS REQUIRED FOR SUBMISSION OF PLANNING APPLICATION

Do you believe that, if the development is granted permission, the general Biodiversity Gain Condition would apply?		Yes
Pre-development biodiversity value of on-site habitats on the date of calculation:		**0.12** – Habitat units
		0.01 – Hedgerow units
		0.00 – Watercourse units
Date on-site pre-development biodiversity value was calculated:		**07/08/2025**
If an earlier date, to the date of the planning application, has been used, please provide details why this date has been used:		Calculation completed in advance to support planning application
When was the version of the biodiversity metric used published:		**03/07/25 (version 1.0.4)**
Please provide the reference or supporting document/ plan names for the: **i. Biodiversity metric calculation** **ii. On-site irreplaceable habitats (if applicable)** **iii. On-site habitats existing on the date of the application for planning permission (if applicable)**	i.	Land at 90 Downs Road SBMCT
	ii.	n/a
	iii.	REPORT 1527 BNG Land at 90 Downs Road DA13 9HQ .pdf Baseline Habitat Map Land at 90 Downs Road DA13 9HQ.pdf Post Intervention Habitat Map Land at 90 Downs Road DA13 9HQ.pdf
Has there been any loss (or degradation) of any on-site habitat(s), resulting from activities carried out before the date the on-site pre-development biodiversity value was calculated. Either: - **on or after 30th January 2020 which were not in accordance with a planning permission; or** - **on or after 25 August 2023 which were in accordance with a planning permission?**		No
Does the development site have irreplaceable habitats which are: **i. on land to which the application relates; and** **ii. exist on the date of the application for planning permission, (or an earlier agreed date)**		No

BIODIVERSITY NET GAIN REPORT

Ref: 1527	Land at 90 Downs Road

EXECUTIVE SUMMARY

ECOassistance have been commissioned to carry out a Biodiversity Net Gain (BNG) assessment of Land at 90 Downs Road, Istead Rise, Gravesend, Kent DA13 9HQ. The site is to be the subject of an upcoming planning application for:

Proposed Dwelling

The baseline habitat units for the site have been calculated using the Statutory Biodiversity Metric Calculation Tool. This report utilises Version 1.0.4 of the Statutory Biodiversity Metric Calculation Tool which was released on 03/07/25.

The baseline value for the site = 0.12 habitat units and 0.01 hedgerow units. In order to meet the statutory requirement and the local plan target for this site the development must provide +10% BNG of this figure. This must include offsetting any biodiversity losses which occur. Under the current proposals a total of 0.10 habitat units are to be lost through development.

Under the current proposals minor habitat losses are unavoidable. Without off-site interventions the proposals are expected to lead to a 0.06 unit deficit of the habitat units and 0.00 (0.001) deficit of the hedgerow units that are required to achieve the mandatory +10% BNG.

It has been concluded through the assessment process that it is not possible to provide +10% BNG through on-site interventions. BNG +10% will need to be secured by purchasing the requisite number of credits to meet the BNG obligation through an off-site provider.

This assessment has been undertaken so that the planning application can be validated. The biodiversity metric tool has been provided to the client separately for the purpose of seeking out an off-site provider of biodiversity units to make their own enquiries over purchase costs and to complete the BNG process.

The off-site provider will create or enhance habitats to generate biodiversity units to meet the 0.06 unit deficit of habitat units and 0.00 hedgerow units. The units provided will be subject to a spatial risk multiplier and the biodiversity metric tool will calculate the value of off-site actions relative to the project. In real terms it is likely that >0.06 habitat units and 0.00 hedgerow units will be required to be purchased off-site because of the spatial risk multiplier which must be applied.

Table 1: Biodiversity units the on-site baseline, on-site post-intervention and total on-site net change in biodiversity units

On-site baseline	*Area habitat units*	0.12	
	Hedgerow units	0.01	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	*Area habitat units*	0.06	
	Hedgerow units	0.01	
	Watercourse units	0.00	
On-site net change (units & percentage)	*Area habitat units*	-0.05	-45.52%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%

Table 2: Biodiversity units for habitat units for the off-site baseline, off-site post-intervention and total off-site net change in biodiversity units. This does not include spatial risk multiplier deductions

Off-site baseline	*Area habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Area habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	*Area habitat units*	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%

Table 3: Sum of the on-site and off-site unit change before the spatial risk multiplier deductions are made, and the biodiversity unit value of spatial risk multiplier deductions.

Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	-0.05
	Hedgerow units	0.00
	Watercourse units	0.00
Spatial risk multiplier (SRM) deductions	*Area habitat units*	0.00
	Hedgerow units	0.00
	Watercourse units	0.00

Table 4: The total net biodiversity unit and net percentage change for the project, including all on-site and off-site interventions and including spatial risk multiplier deductions.

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	-0.05
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	-45.52%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	No - Check Trading Summaries ▲	

Client Name:	Alder Homes Limited	
Date of Completion:	15/08/2025	
Date of Site Survey:	25/07/2025	
Doc. Version Control:	1.0	
	Name:	Role:
Report Author:	Edward Clark	Principal Ecologist
Report Review:	Julia Blackwood	Managing Director
Site Surveyor	Edie Burns	Ecologist

DISCLAIMER

This report considers the instructions and requirements of the client and is not intended for and should not be relied upon by any third party.

In accordance with current good practice guidance, the results contained within this report can be relied on for decision-making purposes without the need to be updated for six months providing there is no significant change in land use or land management in that time.

Interpretations and recommendations contained in this report represent the author's professional opinions. They are based on currently accepted industry practices and personal experience. This is a working document and must be updated if development proposals change, or new information become available.

CONTENTS

INTRODUCTION

ECOassistance have been commissioned by Alder Homes Limited (Hereafter: the client) to undertake a Biodiversity Net Gain (BNG) assessment of Land at 90 Downs Road, Istead Rise, Gravesend, Kent DA13 9HQ.

The site is located in Gravesend which is in the South East region of England. The site is within the Gravesham Borough Council Local Planning Authority (LPA). The grid reference for the approximate centre of the site is: TQ 63533 69282.

An overhead satellite image with indicative red line boundary of the development area (hereafter referred to as: the site) shown within the context of the habitats in the wider area is provided in Figure 1 below.

Figure 1: Overhead satellite image of the red line boundary (indicative) of the site

The proposed planning application is for:

Proposed Dwelling

This report provides outline recommendations for how best to achieve +10% BNG through development in accordance with standing guidance to meet the statutory requirement and the BNG target set within the local plan.

BNG REQUIREMENTS

Mandatory BNG, as part of the Environment Act (2022), came into place for all minor developments from April 2024. The National Planning Policy Framework (NPPF) states that planning policy should identify and pursue opportunities for securing measurable gains for biodiversity.

The national target for mandatory biodiversity net gain is 10%, although local targets may differ, and local planning strategies should be consulted. For this site, Gravesham Borough Council LPA indicates that a minimum 10% BNG must be achieved.

The current model for assessing BNG (used in this report) is the Statutory Biodiversity Metric Calculation Tool (version 1.0.4).

MITIGATION HIERARCHY

The Statutory Biodiversity Metric Calculation Tool follows the mitigation hierarchy, which is an important principle of ecological good practice. The mitigation hierarchy prioritises retaining habitats and minimising habitat damage; before looking to enhance or recreate habitats on site in the first instance; before finally enhancing or creating habitats off site. This sequential approach is encouraged by the biodiversity metric because it allows overall biodiversity gains to be achieved more easily through the avoidance of on-site habitat losses, rather than relying solely on the creation of new habitat or the enhancement of existing habitat. It works this way because the metric applies multipliers that are based on the risks inherent in creating or restoring habitat, and which are not applicable when existing habitat is safeguarded.

The Biodiversity Metric includes a rule which mandates that lost habitats must be compensated for on a "like for like" or "like for better" basis. As such, new or restored habitats should aim to achieve a higher distinctiveness and/or condition than those to be lost.

STATUTORY OBLIGATIONS

The use of the biodiversity metric does not negate the projects statutory obligations in relation to protected species and habitats.

RELEVANT LEGISLATION AND PLANNING POLICIES

Relevant legislation implications for this site include:

- The Conservation of Habitats and Species Regulations 2010 (as amended);
- The Wildlife and Countryside Act 1981 (as amended);
- The Countryside and Rights of Way Act 2000;
- The Natural Environment and Rural Communities Act (NERC Act) 2006;
- Environment Act (2022).

Planning policies, both local and national, may affect any proposed development. Relevant planning policies to this development include;

- National Planning Policy Framework;
- Local policies

SITE AIMS AND OBJECTIVES

The aim of the BNG assessment is to:

- Provide a baseline assessment of the habitats on the site using the Statutory Biodiversity Metric Calculation Tool.

- Provide a predicted score based on proposed habitat creation and enhancement using the Statutory Biodiversity Metric Calculation Tool.
- Provide suitable long term management recommendations, for the site, to ensure habitats reach and maintain their desired condition.

1. Removed trees

A desk search utilising historic satellite images has identified some degradation of the habitats within the site which occurred between 2022 and 2025. Trees located within the western part of the site; near to the road were removed at some time between 2022 when they are visible in Google Streetview (Figure 2) and 2025 when the site survey found them to be absent (Figure 3).

Figure 2: Google street view image dated November 2022

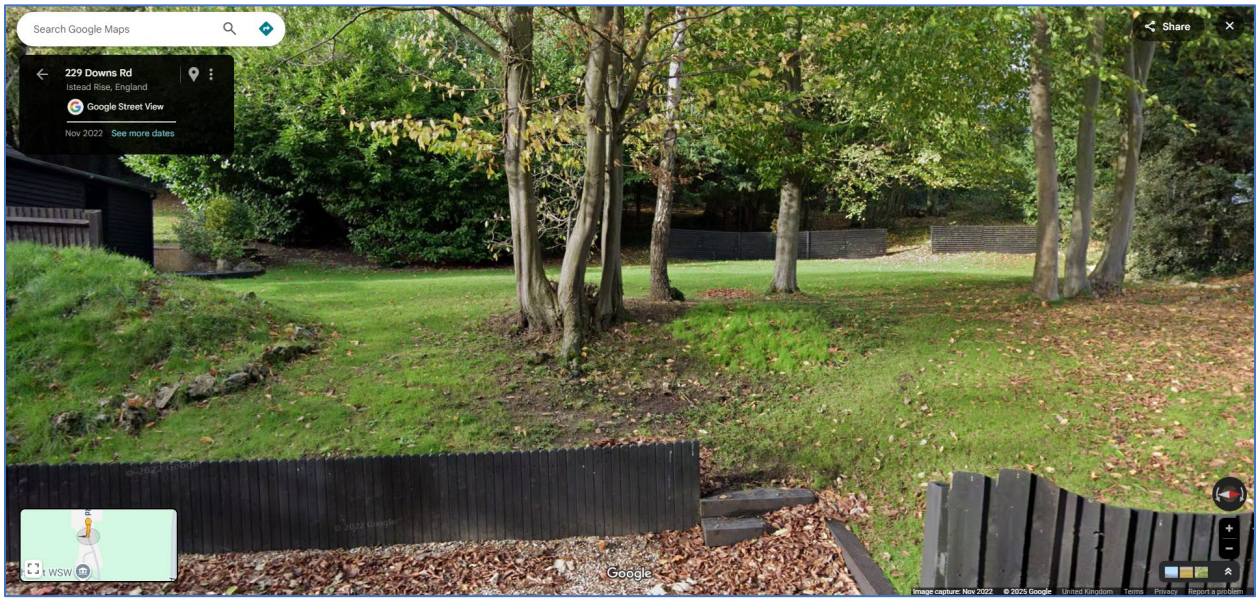


Figure 3: Site photo which was taken during the BNG survey visit in July 2025

The size of the trees that have been removed has been determined using data from an Arboricultural Report[1] completed at the site in March 2019. Trees within the residential private garden (exclusive of the woodland area) which are <30cm Diameter at Breast Height (DBH) should not be recorded within the metric in line with the guidance. On this basis no trees have been recorded as degraded or backdated within the baseline. T2 & T4 (Table 5) both had DBH of 280mm in 2019 and it is assumed that because these were both multi stemmed trees that the largest of the stems in both examples did not exceed an average stem diameter growth of 5mm per year. The table below shows the information recorded for the eight trees removed upon which the BNG calculation has been based.

[1] *Arboricultural Report - GRS/TS/TCP/AIA/TPP/19/19, GRS AbroricultItural Consultant, March 2019*

Table 5: Tree Survey Schedule extract from Arboricultural Report March 2019

No.	Species	Height	Trunk Dia.	Radial Crown Spread	Crown Clear-ance	Height to 1st Branch	Life Stage
T2	Hornbeam *(Carpinus betulus)*	15m	280mm ivyE 110mmN 220mmE 200mm ivyW	N3m E4.5m S3m W4m	N2m E2.5m S3m W2m	2m N	SM
T3	Silver birch *(Betula pendula)*	15m	210mm	N1.7m E1.5m S12m W2m	8m	7m S	Y
T4	Hornbeam *(Carpinus betulus)*	17m	280mm	N2m E1.5m S2m W6m	N4m E3m S2.5m W3.5m	3.5m W	SM
T5	Ash *(Fraxinus excelsior)*	18m	250mm	N4m E2m S3m W5m	8m	6m W	SM
T6	Hornbeam *(Carpinus betulus)*	15m	250mm ivy	N4m E3m S2m W5m	4m	4m W	SM
T7	Hornbeam *(Carpinus betulus)*	16m	270mmW 160mmE	N4m E3m S2m W4.5m	6m	3.5m NW	SM
T8	Hornbeam *(Carpinus betulus)*	15m	250mm	N3.6m E3m S1.5m W2.5m	2m	3m N	SM
T9	Hornbeam *(Carpinus betulus)*	12m	180mm	N4m E3m S2m W1m	1.5m	2m N	SM

2. The area measurements are based on QGIS software and georeferenced drawings of the site block plans or topographical survey drawings as provided by the architect or client. Digital Elevation Models or terrain analysis has not been used to calculate the exact area of slopes within the site.
3. Values of units being displayed up to two decimal places within the Statutory Biodiversity Metric Calculation Tool may lead to apparent rounding errors within this report. While every effort has been made to ensure accuracy, minor discrepancies may arise when summing or comparing values. These rounding variations are a natural consequence of limiting decimal precision and do not significantly impact the overall calculations or conclusions. Readers should be aware of this when interpreting numerical data, particularly in cases where cumulative totals or differences are involved.

METHODOLOGY

A BNG assessment has been conducted using the free and open-source geographic information system QGIS alongside the Statutory Biodiversity Metric Calculation Tool.

The methodology as set out in the Statutory Biodiversity Metric Calculation Tool User Guide has been followed. The Statutory Biodiversity Metric Calculation Tool converts habitats into 'biodiversity units' which are the 'currency' of the metric.

DESK SEARCH

A desk-based search the Multi-Agency Geographic Information for the Countryside (MAGIC) governmental website which provides geographic information in map form was used to search for local statutory and non-statutory land-based designations of the site.

An aerial map search using freely available resources was undertaken to assess recent and historical land use and help detect any damage to the habitats within and around the site that could affect the condition of baseline habitats.

A search for previous planning applications including ecological survey work at the site was undertaken and included if deemed to be relevant.

Local planning policies, landscape data and Local Nature Recovery Strategies (LNRS) were used to assign the strategic significance to habitats within the site.

BASELINE ASSESSMENT

The BNG assessment is based on habitat data collected during a site survey visit undertaken on 25/07/25 by trained BNG ecologist and professional botanist Edie Burns. The site survey was undertaken in fair weather conditions and during daylight hours.

The baseline assessment is calculated by categorising the habitats on site into the corresponding UK Habitat Classification (UKHab) Version 2.0 and feeding these into the metric. The metric then assigns the habitat distinctiveness.

A strategic significance is also assigned to each habitat type. Strategic significance relates to the spatial location of a habitat parcel and works at a landscape scale. It gives additional value to habitats of strategic importance to that local area.

Biodiversity metric uses habitat condition as one of the measures of habitat quality. The condition assessment measures a habitat parcel against the ecological optimum state for that particular habitat. The biodiversity metric provides a list of assessment criteria for each habitat type. The condition of the habitat is then assessed against these criteria; the more criteria present within the habitat the higher the assessed condition.

CALCULATING UNITS

Biodiversity units are calculated using both the size and quality of a parcel of habitat. The metric uses habitat area (measured in hectares) as its core measurement, except for linear habitats (hedgerows and lines of trees and rivers and streams) where habitat length (measured in kilometres) is used.

To assess the quality of a habitat biodiversity metric scores:

- **Habitat type**, such as woodland or grassland, according to their relative biodiversity value or distinctiveness. Habitats that are scarce or declining typically score highly relative to habitats that are more common and widespread.
- **Habitat condition**, scoring the biodiversity value of the habitat relative to others of the same type.
- **Habitat location and connectivity**. Being 'better' and 'more joined-up' are important facets of habitats that can contribute to halting and reversing biodiversity declines, so the metric also accounts for whether or not the habitat is sited in an area identified, typically in a relevant local strategy or plan, as being of strategic significance for nature.

PRINCIPLES AND RULES OF THE STATUTORY BIODIVERSITY METRIC

PRINCIPLES

The Biodiversity Metric works under the following principles;

- Principle 1: The metric assessment should be completed by a competent person.
- Principle 2: The use of this biodiversity metric does not override existing biodiversity protections, statutory obligations, policy requirements, ecological mitigation hierarchy or any other requirements. This includes consenting or licensing processes, for example woodlands.
- Principle 3: This biodiversity metric should be used in accordance with established good practice guidance and professional codes.
- Principle 4: This biodiversity metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice.
- Principle 5: Biodiversity units are a proxy for biodiversity and should be treated as relative values.
- Principle 6: This biodiversity metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance.
- Principle 7: Habitat interventions need to be realistic and deliverable within a relevant project timeframe.
- Principle 8: Created and enhanced habitats should be, where practical and reasonable, local to any impact and deliver strategically important outcomes for nature conservation.

- Principle 9: This biodiversity metric does not enforce a minimum habitat size ratio for compensation of losses. Proposals should aim to:
    - maintain habitat extent - supporting more, bigger, better and more joined up ecological networks
    - ensure that proposed or retained habitat parcels are of sufficient size for ecological function

RULES

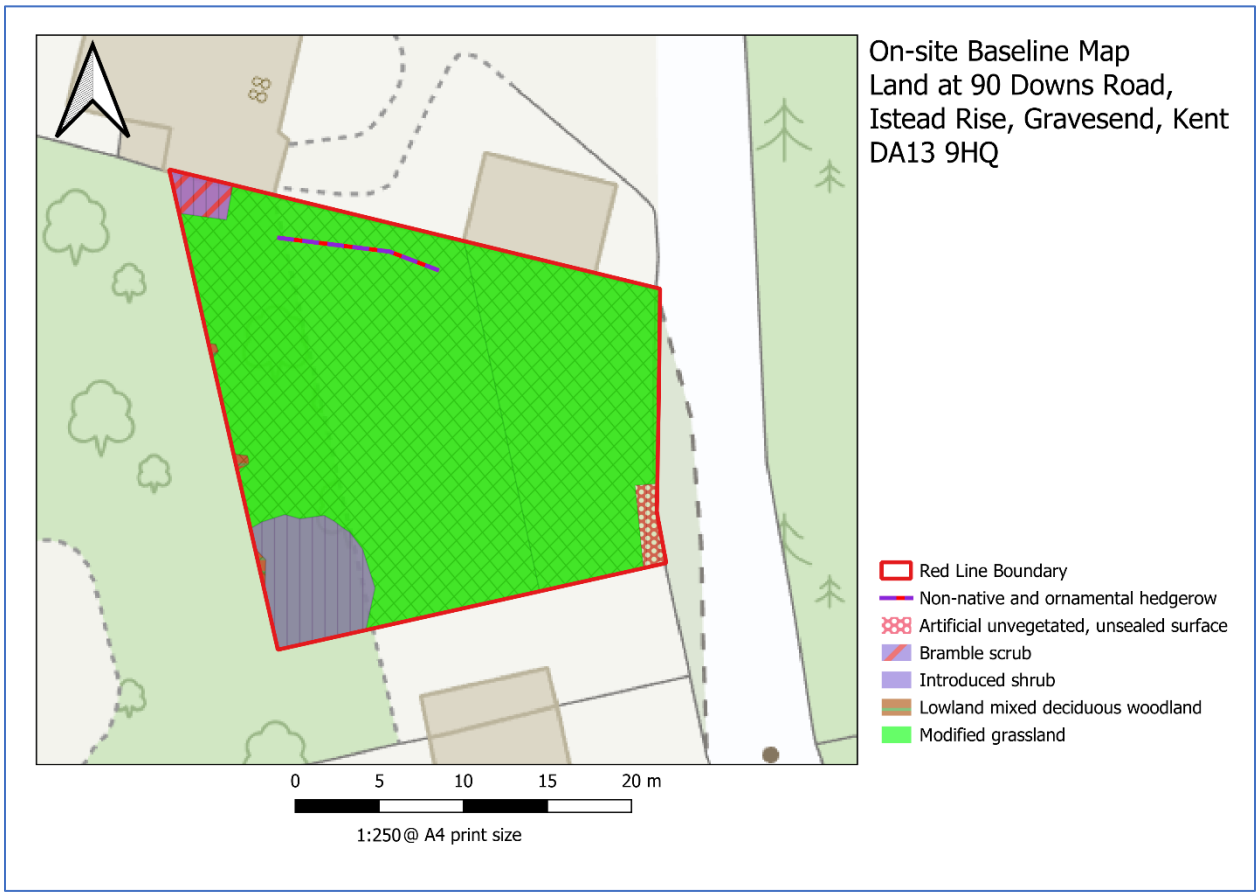
The following rules apply to the Biodiversity Metric;

- Rule 1: The trading rules of this biodiversity metric must be followed.
- Rule 2: Biodiversity unit outputs, for each type of unit, must not be summed, traded, or converted between types. The requirement to deliver at least a 10% net gain applies to each type of unit.
- Rule 3: To accurately apply the biodiversity metric formula, you must use the statutory biodiversity metric calculation tool or small sites biodiversity metric tool (SSM) for small sites. The tools remove the need for a user to manually calculate the change in biodiversity value. The tool will summarise the results of the calculation and inform a user whether the biodiversity net gain objective has been met.
- Rule 4: In exceptional ecological circumstances, deviation from this biodiversity metric methodology may be permitted by the relevant planning authority.

BASELINE HABITATS

The location and extent of the habitats that are present within the site are indicated in Figure 5 below and described in the subsections beneath the figure.

Figure 4: Existing habitat map



WOODLAND AND FOREST - LOWLAND MIXED DECIDUOUS WOODLAND (WLF)

Woodland habitat borders the site to the west and in places overlaps the boundary. Small areas of woodland have therefore been included with the baseline.

The woodland edges are partially sloped and include limited scrub and ground flora. This is likely due to regular management of the woodland flora.

All of the trees in the woodland are European hornbeam *Carpinus betulus*. A limited number of small shrubs of other native species including field maple *Acer campestre*, hazel *Corylus avellana*, holly *Ilex aquifolium* and ash *Fraxinus excelsior* are present.

Figure 6 below shows the sparsely vegetated woodland floor which appears to be managed regularly to keep it clear of shrubs and scrub. The ground layer is heavily disturbed.

Figure 5: Site photo of woodland edge on site (facing north)

BRAMBLE SCRUB (H3D)

A small patch of bramble *Rubus fruticosus* agg. scrub is located in the northwestern corner of the site.

MODIFIED GRASSLAND (G4)

Modified grassland is present and makes-up approximately two-thirds of the site. The eastern side of the modified grassland is sloped and is less regularly managed than the western side of the modified grassland.

The eastern side of the modified grassland has a sward height of c.15cm and is dominated by perennial ryegrass *Lollium perenne* and common selfheal *Prunella vulgaris*. Around 15 other species of herbaceous plants and grasses were recorded at an 'Occasional' to 'Rare' frequency (on the DAFOR scale). Species present in the eastern side include Yorkshire fog *Holcus lanatus*, clustered dock *Rumex conglomeratus*, ribwort plantain *Plantago lanceolata*, and dandelion *Taraxum sp*. Approximately five species per m^2 are present.

The western side of the modified grassland is closely managed, with a shorter sward height of c.5cm. The western area is dominated by creeping cinquefoil *Potentilla reptans*, creeping buttercup *Ranunculus repens* and common selfheal. Approximately four species per m^2 are present. Figure 7 below shows the eastern (right) and the western (left) sections of modified grassland.

Figure 6: Site photos showing the eastern (right) and the western (left) modified grassland habitats.

INTRODUCED SHRUB (U~847)

A large cherry laurel *Prunus laurocerasus* shrub is present near to the southern boundary of the site. The shrub is clearly visible in the top-left corner of Figure 7 (above).

ARTIFICIAL UNVEGETATED, UNSEALED SURFACE (U1C)

A small area of gravel used for parking is present in the eastern corner of the site.

NON-NATIVE AND ORNAMENTAL HEDGEROW

A short length of non-native Cypress sp. hedgerow is present in the north of the site.

BASELINE ASSESSMENT

The table below summarises the baseline habitat assessment for the site which currently contains a total of 0.12 habitat baseline units[2] and 0.01 hedgerow units.

Table 6: Summary of BNG baseline assessment

On Site Area Habitats						
Broad Habitat	**Habitat Type**	**Area (hectares)**	**Distinctiveness**	**Condition**	**Strategic significance**	**Total habitat units**
Grassland	Modified grassland	0.0521	Low	Poor	Low Strategic Significance	0.10

[2] *The habitat unit values have been rounded to the two decimal places.*

Heathland and shrub	Bramble scrub	0.0007	Medium	Condition Assessment N/A	Low Strategic Significance	0.00
Urban	Artificial unvegetated, unsealed surface	0.0006	V.Low	N/A - Other	Low Strategic Significance	0.00
Urban	Introduced shrub	0.0043	Low	Condition Assessment N/A	Low Strategic Significance	0.01
Woodland and forest	Lowland mixed deciduous woodland	0.0002	High	Poor	High strategic significance	0.00
				On Site Habitat Baseline	**0.12**	

On Site Hedgerows					
Habitat type	**Length (km)**	**Distinctiveness**	**Condition**	**Strategic significance**	**Total hedgerow units**
Non-native and ornamental hedgerow	0.01	V.Low	Poor	Low Strategic Significance	0.01
				On Site Hedgerow Baseline	**0.01**

BASELINE IMPACTS

The project as proposed is expected to impact the areas of grassland which cover the central and eastern parts of the site. It is assumed that all areas of grassland will be lost during the construction process. All of the other vegetated habitats within the site are to be retained. As a result, 0.10 habitat units will be lost to the development.

The habitat losses that will result from the proposals are detailed in Table 7 below.

Table 7: Baseline habitats retained/lost

Broad Habitat	Habitat Type	Area (hectares)	Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost	Units lost
Grassland	Modified grassland	0.0521	0	0	0.00	0	0.0521	0.10
Heathland and shrub	Bramble scrub	0.0007	0.0007	0	0.00	0	0	0.00
Urban	Artificial unvegetated, unsealed surface	0.0006	0	0	0.00	0	0.0006	0.00

Urban	Introduced shrub	0.0043	0.0043	0	0.01	0	0	0.00
Woodland and forest	Lowland mixed deciduous woodland	0.0002	0.0002	0	0.00	0	0	0.00

Habitat type	Length (km)	Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost
Non-native and ornamental hedgerow	0.01	0.01	0	0.01	0	0	0.00

PROPOSED LAYOUT (HABITAT CREATION & ENHANCEMENT)

According to The Statutory Metric User Guide, creation and enhancement of specific habitat types cannot be achieved on-site within a private garden. Any habitats created within a private garden post development can only be described as 'vegetated garden habitat' which is of low intrinsic value; subject to regular disturbance; and could be removed or replaced at any time.

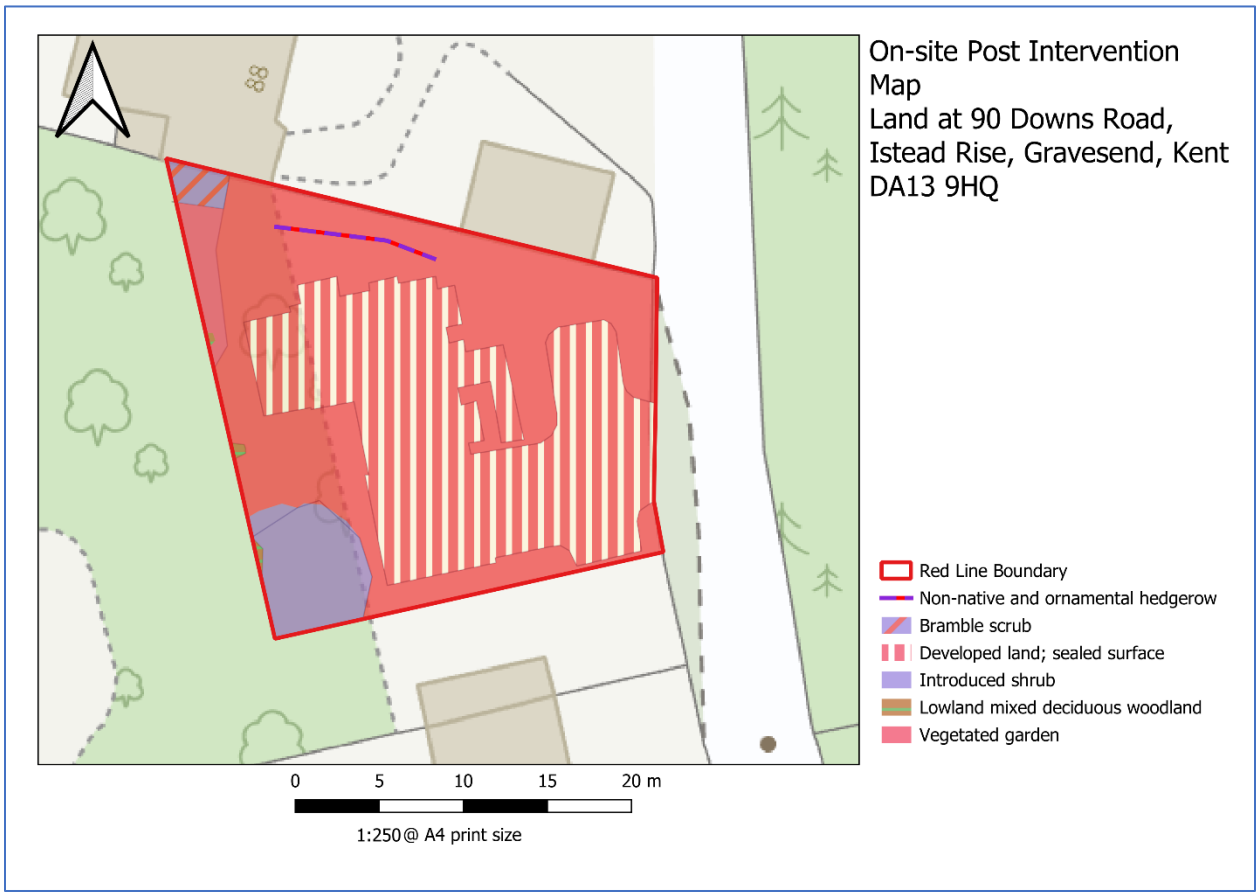
A total of 0.05 units of habitat will be created within the site through new garden habitats. Details of how these habitats are created are provided in Table 8 below.

Table 8: Proposed habitat creation/enhancements

Type	Broad Habitat	Habitat Type	E. Total Area (m^2)	Habitat units created onsite	Required Enhancement/ Management
CREATION	Urban	Developed land; sealed surface	262	0	• Follow ecological protection measures during construction (if required)
CREATION	Urban	Vegetated garden	264	0.05	• Sow low growing seed mix such as LW12M • Maintain Varied sward height- >20% <7cm and >20% >7cm. • Maintain an absence of non-native species and <5% undesirable species/ damage • Plant species with known wildlife benefit

The proposed layout for habitat creation is shown in Figure 8 below.

Figure 7: Proposed habitats on the site



UNIT CHANGE

Following the recommendations for habitat creation and enhancement as detailed above, a total of 0.05 habitat units will be created. As a result, the on-site net change in habitat units will be -45.52% and =0.00% in hedgerow units.

A screenshot of the headline results page taken from the biodiversity metric calculations for the site is shown in Table 9 below. More detailed results taken from the metric are provided in the appendix.

Table 9: Headline BNG results page

Land at 90 Downs Road		
Headline Results	Return to results menu	
Scroll down for final results ⚠		
On-site baseline	*Area habitat units*	0.12
	Hedgerow units	0.01
	Watercourse units	0.00
On-site post-intervention (Including habitat retention, creation & enhancement)	*Area habitat units*	0.06
	Hedgerow units	0.01
	Watercourse units	0.00
On-site net change (units & percentage)	*Area habitat units*	-0.05
	Hedgerow units	0.00
	Watercourse units	0.00
Off-site baseline	*Area habitat units*	0.00
	Hedgerow units	0.00
	Watercourse units	0.00
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Area habitat units*	0.00
	Hedgerow units	0.00
	Watercourse units	0.00
Off-site net change (units & percentage)	*Area habitat units*	0.00
	Hedgerow units	0.00
	Watercourse units	0.00
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	-0.05
	Hedgerow units	0.00
	Watercourse units	0.00
Spatial risk multiplier (SRM) deductions	*Area habitat units*	0.00
	Hedgerow units	0.00
	Watercourse units	0.00
FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	-0.05
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	-45.52%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	No - Check Trading Summaries ▲	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Area habitat units	10.00%	0.12	0.13	0.06
Hedgerow units	10.00%	0.01	0.01	0.00
Watercourse units	10.00%	0.00	0.00	0.00

Through development there will be a net loss of 0.05 habitat units. It is not possible to offset these losses and provide the requisite BNG within the site due to the restrictions on enhancing habitats within domestic gardens. To provide +10% of the baseline units, 0.06 habitat units and 0.00 hedgerow units will need to be created off-site.

Any off-site interventions must be secured through a legal agreement such as an S106 or HMMP which ensures they are maintained for 30 years. This will be included in the purchase price.

The requisite number of habitat units (subject to a spatial multiplier) will need to be purchased from an off-site provider. The completed Statutory Biodiversity Metric Tool for this site contains all the information required for an off-site provider to quote for the requisite habitat and hedgerow units to meet the statutory obligation.

Environment Act (2021). C.30. Available at: https://www.legislation.gov.uk/ukpga/2021/30/contents

Conservation of Habitats and Species Regulations (2017), No. 1012. Available at https://www.legislation.gov.uk/uksi/2017/1012

Wildlife and Countryside Act (1981). Available at https://www.legislation.gov.uk/ukpga/1981/69

Government of the United Kingdom. (2023). National Planning Policy Framework. Available at https://www.gov.uk/guidance/national-planning-policy-framework

Department for Environment, Food & Rural Affairs. (2023). The Statutory Biodiversity Metric User Guide. [Online]. Available at: https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides

The Countryside Rights of Way Act (2000) Available at: https://www.legislation.gov.uk/ukpga/2000/37/contents

The Natural Environment and Rural Communities Act (NERC Act) (2006). Available at: https://www.legislation.gov.uk/ukpga/2006/16/contents

UK Habitat Classification Working Group. (2023). UK Habitat Classification (UKHab) Version 2.0. [Online]. Available at: https://ukhab.org/

Ordnance Survey. (2024). OS Maps API Layer. Available at: https://www.ordnancesurvey.co.uk/products/os-maps-api

Here's a Harvard-style reference for Gravesham Borough Council's Biodiversity Net Gain (BNG) guidance:

Gravesham Borough Council (2025) Biodiversity Net Gain. Available at: https://www.gravesham.gov.uk/planning/guide-planning/2

Kent County Council. (2024). Interim Strategic Significance Guidance for Biodiversity Net Gain in Kent and Medway. Making Space for Nature Kent. Available at: https://www.makingspacefornaturekent.org.uk/wp-content/uploads/2024/01/BNG-Guidance-Note_Strategic-Significance_26.01.24.pdf

Biodiversity Net Gain for Kent and Medway. Available at: https://www.makingspacefornaturekent.org.uk/bng/

KLIS – Kent Landscape Information System. Available at: https://webapps.kent.gov.uk/KCC.KLIS.Web.Sites.Public/Default.aspx

APPENDIX 1: SCREENSHOTS OF BNG METRIC

ON-SITE BASELINE HABITATS

Existing area habitats				Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Ecological baseline
Broad Habitat	Habitat Type	Irreplaceable habitat	Area (hectares)	Distinctiveness	Condition	Strategic significance		Total habitat units
Grassland	Modified grassland	No	0.0521	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.10
Heathland and shrub	Bramble scrub	No	0.0007	Medium	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.00
Urban	Artificial unvegetated, unsealed surface	No	0.0006	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00
Urban	Introduced shrub	No	0.0043	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.01
Woodland and forest	Lowland mixed deciduous woodland	No	0.0002	High	Poor	Formally identified in local strategy	Same habitat required =	0.00

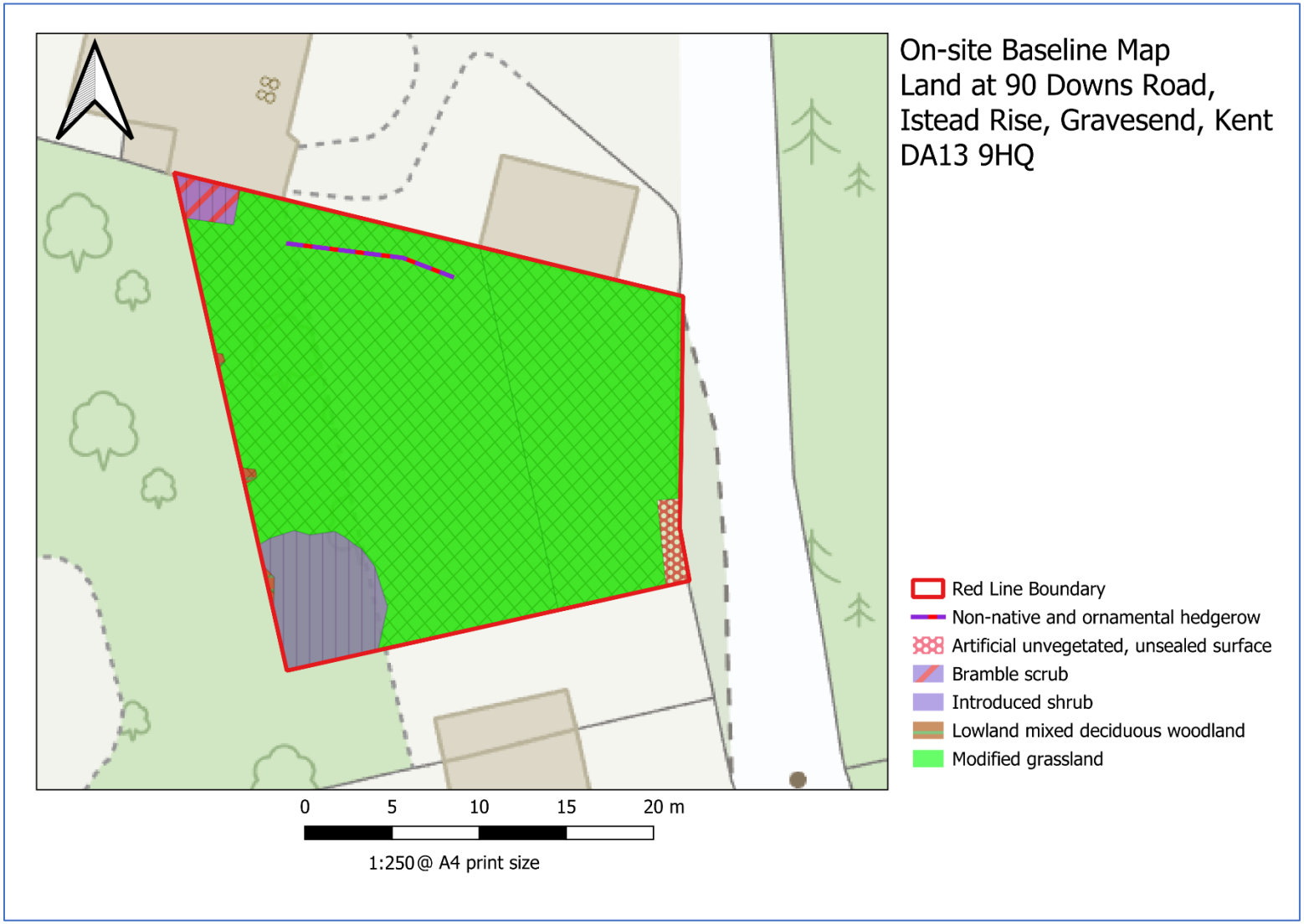
ON-SITE HABITAT CREATION

Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness	Condition	Strategic significance	Temporal multiplier		Difficulty	Habitat units delivered
			Distinctiveness	Condition	Strategic significance	Standard or adjusted time to target condition	Final time to target condition (years)	Final difficulty of creation	
Urban	Developed land; sealed surface	0.0262	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	0	Low	0.00
Urban	Vegetated garden	0.0264	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	1	Low	0.05

ON-SITE BASELINE HEDGEROW

Existing hedgerow habitats			Distinctiveness		Condition		Strategic significance			Required Action to Meet Trading Rules	Ecological baseline
Hedge number	Habitat type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier		Total hedgerow units
1	Non-native and ornamental hedgerow	0.01	V.Low	1	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.01

APPENDIX 2: SCREENSHOT OF BASELINE HABITAT MAP



APPENDIX 3: SCREENSHOT OF POST INTERVENTION HABITAT MAP

On-site Post Intervention Map
Land at 90 Downs Road, Istead Rise, Gravesend, Kent DA13 9HQ

- Red Line Boundary
- Non-native and ornamental hedgerow
- Bramble scrub
- Developed land; sealed surface
- Introduced shrub
- Lowland mixed deciduous woodland
- Vegetated garden

APPENDIX 4: PROPOSED SITE PLANS

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)														
UK Habitat Classification (UKHab) Habitat Type														
Grassland - Modified grassland														
Habitat Description														
Modified grassland adjacent to a residential property. The grassland can be separated into two distinct sections, one was sloped with a longer sward height of around 20-30cm and approx 70% cover of Lollium perenne with common selfheald abundant alongside >15 other species which were between rare and frequent (DAFOR scale). The other section was closely mown to a sward height of <5cm and was less speciose, dominated by a few common broadleaved species including creeping buttercup and with a low abundance of grasses. EDIT: Following the condition assessment, both sections of the modified grassland were found to have the same Assessment Result (Poor condition), despite having different Assessment Scores.														
ukhab – UK Habitat Classification														
On-site or off-site, site name and location	Onsite Land at 90 Downs Road, Istead Rise, Gravesend, Kent DA13	**Survey date and Surveyor name**	Edie Burns 25/07/2025											
		Survey reference												
Limitations (if applicable)	None	**Habitat parcel reference**												
		1	2											
		Grid reference												
		TQ 63544 69280	TQ 63554 69282											
Condition Assessment Criteria		**Criterion passed (Yes or No)**												**Notes (such as justification)**
A	There are 6-8 vascular plant species per m^2 present, including at least 2 forbs (these may include those listed in Footnote 1). **Note - this criterion is essential for achieving Moderate or Good condition.** Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m^2 (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	No	No											Parcel 1 <6 species per m2. Parcel 2 had higher species richness, but abundance of those species was low, thus not meeting the requirement of 6-8 sp per m2
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 vertebrates and invertebrates to live and breed.	No	Yes											
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes	Yes											
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	No	No											Grassland is regularly accessed and intensively managed by mowing
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2].	Yes	Yes											
F	Cover of bracken *Pteridium aquilinum* is less than 20%.	Yes	Yes											
G	There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]).	Yes	Yes											
	Essential criterion achieved (Yes or No)	No	No											
	Number of criteria passed	4	5											
Condition Assessment Result	**Condition Assessment Score**	**Score Achieved ×/✓**												
Passes 6 or 7 criteria including	Good (3)													
Passes 4 or 5 criteria including	Moderate (2)													
Passes 3 or fewer criteria;	Poor (1)	X	X											

Condition Sheet: WOODLAND Habitat Type

UK Habitat Classification (UKHab) Habitat Types

Woodland and forest - Lowland beech and yew woodland

Habitat Description

ukhab – UK Habitat Classification

This condition sheet is based on the England Woodland Biodiversity Group (EWBG) Woodland Condition Survey Method, available here:

Woodland Wildlife Toolkit (sylva.org.uk)

IMPORTANT: This biodiversity metric woodland condition assessment must be used to assess woodland being input into the biodiversity metric. The outputs of this condition

On-site or off-site, site name and location	Onsite Land at 90 Downs Road, Istead Rise, Gravesend, Kent DA13 9HQ	**Survey date and Surveyor name**	Edie Burns 25/07/2025
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	
Grid reference	TQ6353169282	**Habitat parcel reference**	

Condition Assessment Criteria

	Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator	Notes (such as justification)
A	**Age distribution of trees**	Three age-classes[1] present.	Two age-classes[1] present.	One age-class[1] present.	2	Most of the trees are hornbeam and of a similar age (intermediate). Some saplings of other species present (young)
B	**Wild, domestic and feral herbivore damage**	No significant browsing damage evident in woodland[2].	Evidence of significant browsing pressure is present in less than 40% of whole woodland[2].	Evidence of significant browsing pressure is present in 40% or more of whole woodland[2].	1	Much of the ground area had been kept clear of shrubs and scrub, except for some sections where ivy, bramble or Dog's mercury had managed to establish
C	**Invasive plant species**	No invasive species[3] present in woodland.	Rhododendron *Rhododendron ponticum* or cherry laurel *Prunus lauroceraus* not present, and other invasive species[3] <10% cover.	Rhododendron or cherry laurel present, or other invasive species[3] ≥10% cover.	1	Cherry laurel present
D	**Number of native tree species**	Five or more native tree or shrub species[4] found across woodland parcel.	Three to four native tree or shrub species[4] found across woodland parcel.	Two or less native tree or shrub species[4] across woodland parcel.	3	5 species found: Holly, ash, field maple, hornbeam and hazel.
E	**Cover of native tree and shrub species**	>80% of canopy trees and >80% of understory shrubs are native[5].	50 - 80% of canopy trees and 50 - 80% of understory shrubs are native[5].	<50% of canopy trees and <50% of understory shrubs are native[5].	3	All canopy trees were Hornbeam (native). Understory native made up of bare ground and ivy, with Dog's mercury, bramble and holly.
F	**Open space within woodland**	10 - 20% of woodland has areas of temporary open space[6]. Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted[7].	21 - 40% of woodland has areas of temporary open space[6].	<10% or >40% of woodland has areas of temporary open space[6]. But if woodland <10ha has <10% temporary open space, please see Good category[7].	1	More than 40% is temporary open space
G	**Woodland regeneration**	All three classes present in woodland[8]; trees 4 - 7 cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland[8].	No classes or coppice regrowth present in woodland[8].	2	Some occasional saplings and small trees present (ash, holly, field maple) but not many.
H	**Tree health**	Tree mortality 10% or less, no pests or diseases and no crown dieback[9].	11% to 25% tree mortality and or crown dieback or low-risk pest or disease present[9].	Greater than 25% tree mortality and or any high-risk pest or disease present[9].	3	No diseases or pests recorded. No crown dieback.
I	**Vegetation and ground flora**	Recognisable NVC plant community[10] at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community[10] at ground layer present.	No recognisable woodland NVC plant community[10] at ground layer present.	1	Limited ground flora with low species richness. Mostly the ground layer comprised bare ground with some litter, with small areas of ivy, bramble or Dog's mercury.
J	**Woodland vertical structure**	Three or more storeys across all survey plots, or a complex woodland[11].	Two storeys across all survey plots[11].	One or less storey across all survey plots[11].	1	Woodland predominantly made up of the Hornbeam tree canopy only. There was very limited presence of shrubs or varied tree heights.
K	**Veteran trees**	Two or more veteran trees[12] per hectare.	One veteran tree[12] per hectare.	No veteran trees[12] present in woodland.	1	No veteran trees present
L	**Amount of deadwood**	50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, branch stubs and stumps, or an abundance of small cavities[13].	Between 25% and 50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities[13].	Less than 25% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities[13].	2	Stumps and piles of dead wood present, in addition to some dead wood on the existing trees.
M	**Woodland disturbance**	No nutrient enrichment or damaged ground evident[14].	Less than 1 hectare in total of nutrient enrichment across woodland area, and or less than 20% of woodland area has damaged ground[14].	1 hectare or more of nutrient enrichment, and or 20% or more of woodland area has damaged ground[14].	1	Most of the woodland area appeared to be managed regularly to keep it clear of shrubs. The ground layer was generally bare ground with twigs and leaves and thus heavily disturbed
				Total Score (out of a possible 39)	22	

Condition Assessment Result	Condition Assessment Score	Result Achieved
Total score >32 (33 to 39)	Good (3)	Poor
Total score 26 to 32	Moderate (2)	
Total score <26 (13 to 25)	Poor (1)	