in partnership with

Denny Ecology

Construction Associates

Rolvenden Primary School, Hastings Road, Rolvenden

Biodiversity Net Gain Statement

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1. Introduction

Planning consent to extend the primary school was granted in 2020. However, this permission has now lapsed, and a new application is being submitted for an extension. This proposal comprises the demolition of three outbuilding within the school grounds, and ground floor extensions to the north-east and east section of the existing school building. Construction contractors will use part of the school playing field to the north-east for temporary parking, utilising rubber lattice matting to minimise damage to the grassland. However, the LPA consider that this constitutes an impact on the grassland, and as this area is over 25sqm, and it is a full application, the project is subject to the statutory 10% Biodiversity Net Gain (BNG) to comply with the Environment Act 2021.

This statement presents the methods and results of the habitat survey and Small Sites Metric (SSM) used to calculate whether there is a deficit in reaching the required 10% BNG within the red-line application boundary.

I am a suitably qualified ecologist, being a Full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM) for 22 years, a practising ecologist for 33 years, and having a BSc in Zoology and a PhD in Ecology.

2. Site survey and assessment methodology

Habitat survey

A site visit was made by Susie Dighton-Brown, Assistant Ecologist, on Friday 17th February to undertake a habitat survey of the proposed red-line site boundary, using UK Habitat methodology (UKHab 2023[1]). Habitats were assigned to UK Habitat types and mapped.

The proposed development work was then superimposed onto the habitat map to elucidate the area of vegetated habitats predicted to be impacted.

The grassland that will be used for temporary parking and the adjacent proposed on-site habitat enhancement area were assessed in detail to determine their existing condition. Four randomly selected 1sqm quadrats were sampled for the plant species present and any dominant species were recorded.

BNG Metric calculation

We used the BNG SSM published in July 2024 to calculate the baseline habitat value and predicted BNG as a result of the proposed development. There are no existing watercourses on the Site. Therefore, the target BNG was for a 10% uplift in area and hedgerow habitats only.

Existing habitats were assigned to UKHab Habitat types (UKHab Ltd 2023), as required by the Statutory Metric. Areas of these habitats were measured. We then measured the habitats impacted by the proposed development, and the areas of habitats to be retained, enhanced and created.

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

3. Results and assessment

Habitats

Existing habitats within the site boundary are buildings and hardstanding (developed land; sealed surface), modified grassland, artificial grass, bare ground, pond, ruderal / ephemeral vegetation, introduced shrubs, trees and an 17m section of ornamental non-native hedgerow. Photos of some of these habitats are shown in Appendix 1. These habitats are mapped in the UKHab habitat plan in Figure 1, below.

Developed land; sealed surface

The majority of the Site is hardstanding and buildings, much of which will be retained. Small areas around the existing main school building will change from hardstanding to building, resulting in no change to the UKHab habitat type. Three outbuildings to the north of the existing main school building are to be removed, two to made into vegetated garden (total area 330m^2), the other into hardstanding.

Artificial unvegetated, unsealed surface

In the western corner of the Site is an area of fake grass/felt blanket cut around five interspersed trees. The ground beneath is believed to be soil. We categorised this as artificial unsealed surface. It will be retained

Introduced shrubs

There is a small area of shrub/ very small trees to the north-east of the existing main school building, comprising the trees/group numbered G1 and T4-T8 in the accompanying tree report. These shrubs will be lost to the development.

Species recorded:
-Tutsan
-Common Hazel
-Rose spp
-Taiwanese Photinia
-Siberian Dogwood
-Japanese Pagoda Tree
-Purple Toadflax

Unvegetated garden

To the east of the existing main school building are raised bed areas of wood chip and bare ground, mainly along the school perimeter fence line. Some of this area will be lost to the development. There are two other areas of this habitat: one north-west of the

existing school car park, to be lost to the development; the other east of the pond, to be retained.

Ruderal / ephemeral

There is a small area of this sparse habitat west of the pond, to be retained.

Species recorded:
-Ivy-leaved speedwell
-Mock Strawberry
-Cut-leaved dead nettle
-Stinking Iris
-Purple dead nettle
-Stinging nettle

Modified Grassland

The modified grassland, forming the south-east corner of the field to the north-east of the school, was found to be in poor condition (see Condition Assessment sheet in Appendix 2), with a high cover of moss species indicating this area has been / is subject to compaction.

Much of this area is where the temporary car parking will be located, which will utilise the following rubber matting to minimise direct damage and compaction to the grassland for up to 52 weeks from March 2025:

Heavy Duty Rubber Grass Mats for Car Parks Playground Safety Mats – Rubber Co

The south-east section of the field will form the on-site BNG enhancement area. The modified grassland will be enhanced to other neutral grassland, by scarifying and sowing wildflower lawn mixture with a high content of yellow rattle (a hemiparsitic species, hosting on, and helping to outcompete coarse grasses. This allows other less competitive species to increase, thus increasing the condition and diversity of the grassland overall. This grassland can either be cut frequently, or left to grow for variable amounts of time, depending on the amenity and management requirements. All arisings from cutting should be removed from the area and composted to prevent nutrient deposition over time, which favours more competitive plant species.

Species recorded in 4no 1m^2 quadrats:
1.
-Perennial rye-grass (dominant)
-Moss sp (not vascular plant)
-Common Selfheal

-Common Yarrow
-Cock's-foot
-Common Chickweed
-Rough Hawkbit
2.
-Perennial rye-grass (dominant)
-White Clover
-Moss sp
-Common Daisy
-Cock's-foot
3.
-Perennial rye-grass (dominant)
-Moss sp.
-Ribwort Plantain
-White Clover
-Mouse Ear Chickweed
-Common Daisy
4.
-Perennial rye-grass (dominant)
-Creeping Buttercup
-Dandelion
-Rough Hawkbit
-Mouse Ear Chickweed
-White Clover

Average no. vascular species – 5

Ornamental non-native hedgerow

There is a 17m length of this hedgerow along the western end of the southern Site boundary. This was dominated by non-native ornamental species.

Species recorded:
-Holm oak
-Scarlet Firethorn
-Common Holly (c.20%)

Trees

There are five small (<30cm DBH), seven medium (≥30<60cm), and 2 large (≥60<90cm DBH) sized trees within the application area. This differs from the trees recorded in the

tree survey report, as five medium-sized trees in the north-west corner of the Site were not included in the tree survey, and three very small trees (<15cm DBH; numbered T6-T8 in the tree report), which were in a group of shrubs, were recorded separately in the tree survey, but included in the shrub group in this assessment.

Four small trees (T1, T4, T5 & T12) are to be removed to facilitate development. All medium-sized and large trees re to be retained.

BNG Metric calculation

When checking Google Earth images, it is apparent that all of the habitats recorded during the site survey appear to have been present before 30 January 2020.

There will be loss of the following:

- 4 small trees
- 490m2 of modified grassland to a temporary car park, although this will only be lost for one year
- 3 outbuildings

Whilst there won't be a loss of hedgerow, there is an existing 17m length of ornamental hedgerow. Given the BNG requires a 10% gain, there needs to be a gain in hedgerow resource over the baseline.

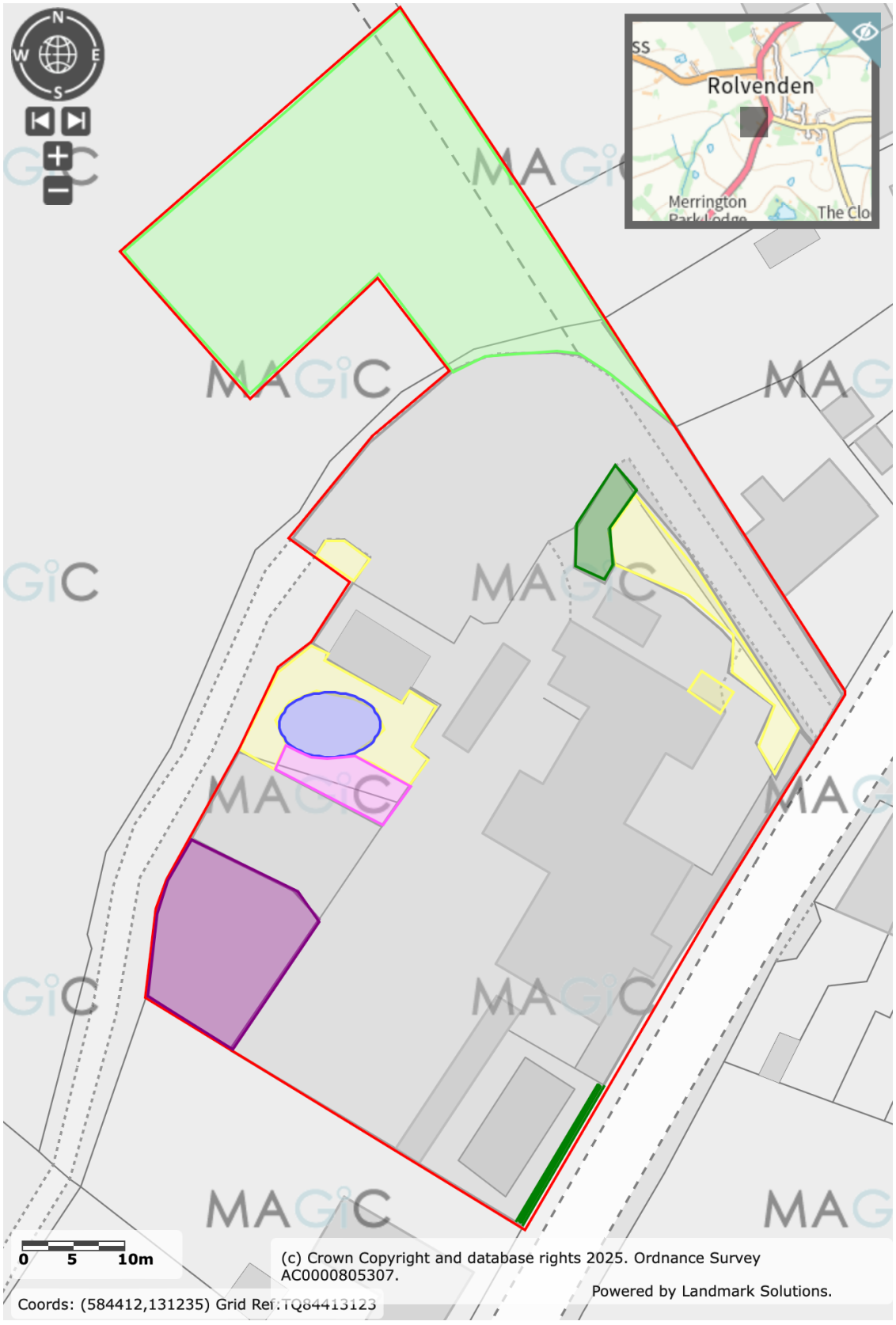
The proposed new habitats are as follows:

- 330m^2 vegetated garden
- 440m^2 other neutral grassland
- 13 small trees
- 10m length of species-rich native hedgerow

Calculated BNG change:

A summary of the BNG Metric calculation results is presented in Appendix 5. Area habitat unit values are 2.3304 at baseline (pre-development), and 2.489 post-development. Hedgerow habitat unit values are 0.017 at baseline (pre-development), and 0.839 post-development. There will be a 10.7% increase in area habitat value, and a 393.8% increase in hedgerow habitat value, as a result of the development. This demonstrates that the proposed scheme will meet the BNG targets through onsite habitat enhancement and creation.

Figure 1. UK Habitat map of Site overlaid onto proposed development layout plan (scale 1:500)



Key:

Solid red line = site boundary Grey shading = Developed land; sealed surface Purple shading = Artificial unvegetated, unsealed surface Dark green = Introduced shrub Light green = Modified grassland Magenta = Ruderal / Ephemeral	Yellow = unvegetated garden Blue = pond Dark blue = ruderal / ephemeral Light blue = introduced shrub Green line = ornamental non-native hedgerow

Appendix 1. Photographs of habitats on the Site

<table>
<tr><td>  </td><td>  </td></tr>
<tr><td>Artificial grass and five medium-sized trees in the north-west corner of the site</td><td>Pond and surrounding bare ground, ruderal / ephemeral vegetation and trees T10 & T11</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>Modified grassland with high cover of moss species</td><td>Modified grassland field to north-east, to be used for temporary car park and BNG enhancement. Note the small tree T12 in the foreground, to be removed</td></tr>
</table>

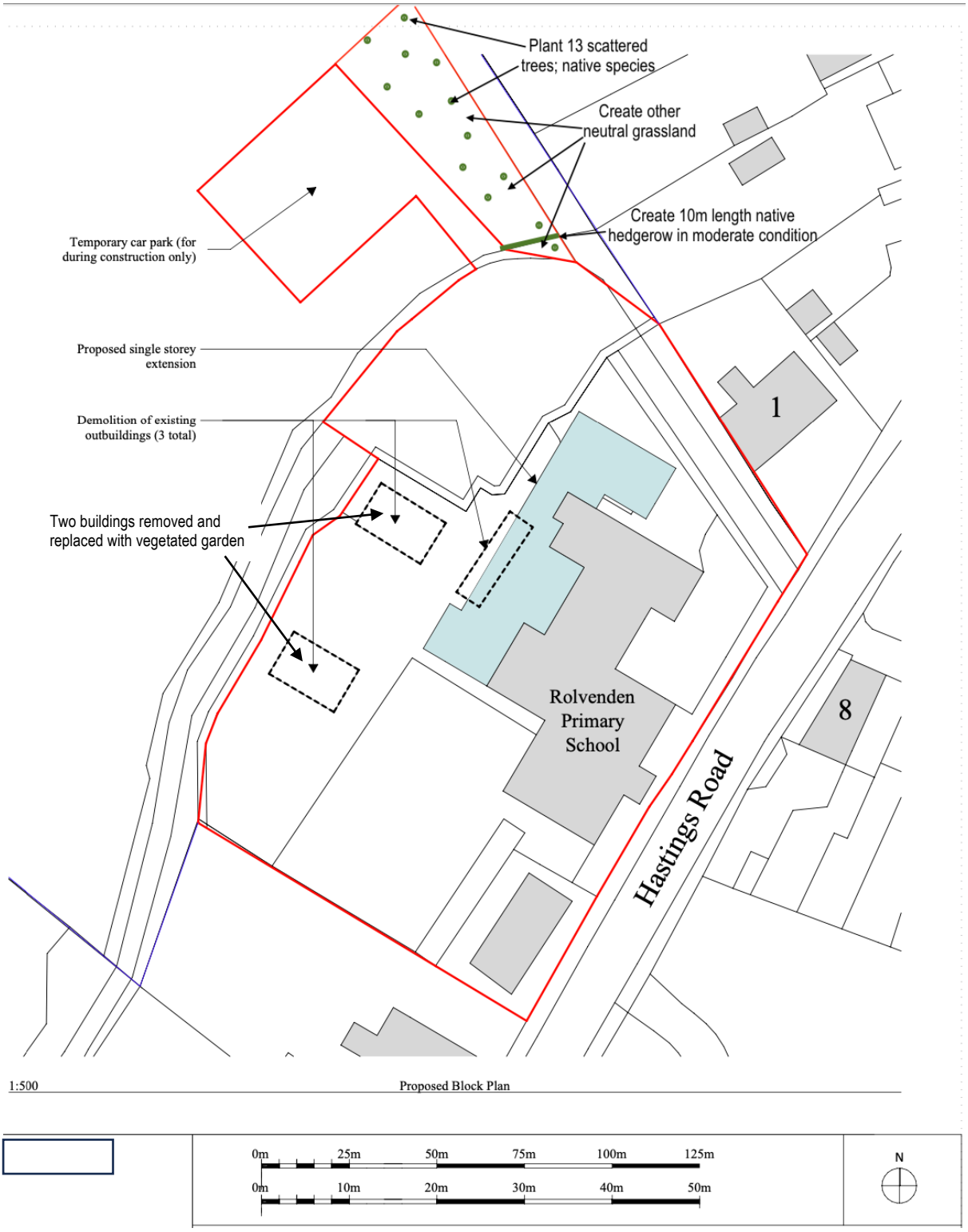
Appendix 2. Modified Grassland Condition Assessment

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UK Habitat Classification (UKHab) Habitat Type			
Grassland - Modified grassland			
On-site or off-site, site name and location	Rolvenden Primary School	**Survey date and Surveyor name**	17/01/2025
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	
Grid reference		**Habitat parcel reference**	
Habitat Description			
Modified grassland dominated by perennial rye-grass			

ukhab – UK Habitat Classification

	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	Only 5 species average
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	>80% below 7cm
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	
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	High cover of moss is indicative of compacted grassland
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2].	Yes	
F	Cover of bracken *Pteridium aquilinum* is less than 20%.	Yes	
G	There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]).	Yes	
	Essential criterion achieved (Yes or No)		No
	Number of criteria passed		4

Appendix 3. Proposed development plan including BNG delivery area



Appendix 4. Priority habitat parcels within 500m of the Site

Site Check Report Report generated on Tue Feb 04 2025
You selected the location: Centroid Grid Ref: TQ84403125

Ancient Woodland (England)

Theme Name	Area (Ha)
Ancient & Semi-Natural Woodland	2.901047
Ancient & Semi-Natural Woodland	1.622985
Ancient & Semi-Natural Woodland	0.837987

Priority Habitat Inventory - Deciduous Woodland (England)

Main Habitats	Area In Hecta	Publication Version
Deciduous woodland	10.01	July_24
Deciduous woodland	12.71	July_24
Deciduous woodland	7.95	July_24

Priority Habitat Inventory - Traditional Orchards (England)

Main Habitats	Area In Hecta	Publication Version
Traditional orchard	0.3	July_24
Traditional orchard	0.88	July_24
Traditional orchard	0.1	July_24

Appendix 5. BNG SSM summary results

Site Name		Enter site name on 2. Site Details	
Sheet Name		Headline Results	
Headline Results			
Headline		BNG Targets Met ✓	
Trading Rules		Trading Rules Satisfied ✓	
Next steps		Check for input errors/rule breaks present in the metric !	
Baseline Units	*Habitat units*	2.3304	
	Hedgerow units	0.0170	
	Watercourse units	Zero Units Baseline	
Post-development Units	*Habitat units*	2.5793	
	Hedgerow units	0.0839	
	Watercourse units	0.0000	
Total net unit change	*Habitat units*	0.2489	✓
	Hedgerow units	0.0669	✓
	Watercourse units	0.0000	
Total net % change	*Habitat units*	10.68%	✓
	Hedgerow units	393.80%	✓

Chart 1 - Unit change by habitat group