



Biodiversity Net Gain Assessment

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Report	Biodiversity Net Gain Assessment
Site Name	Mill Lane Flood Defences
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Client	Mr Robert Carrell
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1.0 INTRODUCTION

1.1 Background

Ecosupport Ltd. were commissioned by Mr. Robert Carrell to undertake a Biodiversity Net Gain Assessment for the proposed development at the parcel of land off Mill Lane, Langstone.

The purpose of the Biodiversity Net Gain (BNG) assessment is to quantify the biodiversity value of the site prior to its development, and the predicted value post development. This is measured in biodiversity units, calculated according to the habitats present based on their size, distinctiveness and condition. This enables the quantitative calculation of the predicted change in biodiversity value as a result of the proposed development, with the objective of achieving a net gain in biodiversity.

This report should be read in conjunction with the associated Environmental Statement (Ecosupport Ltd., 2025).

1.2 Site Location and Description

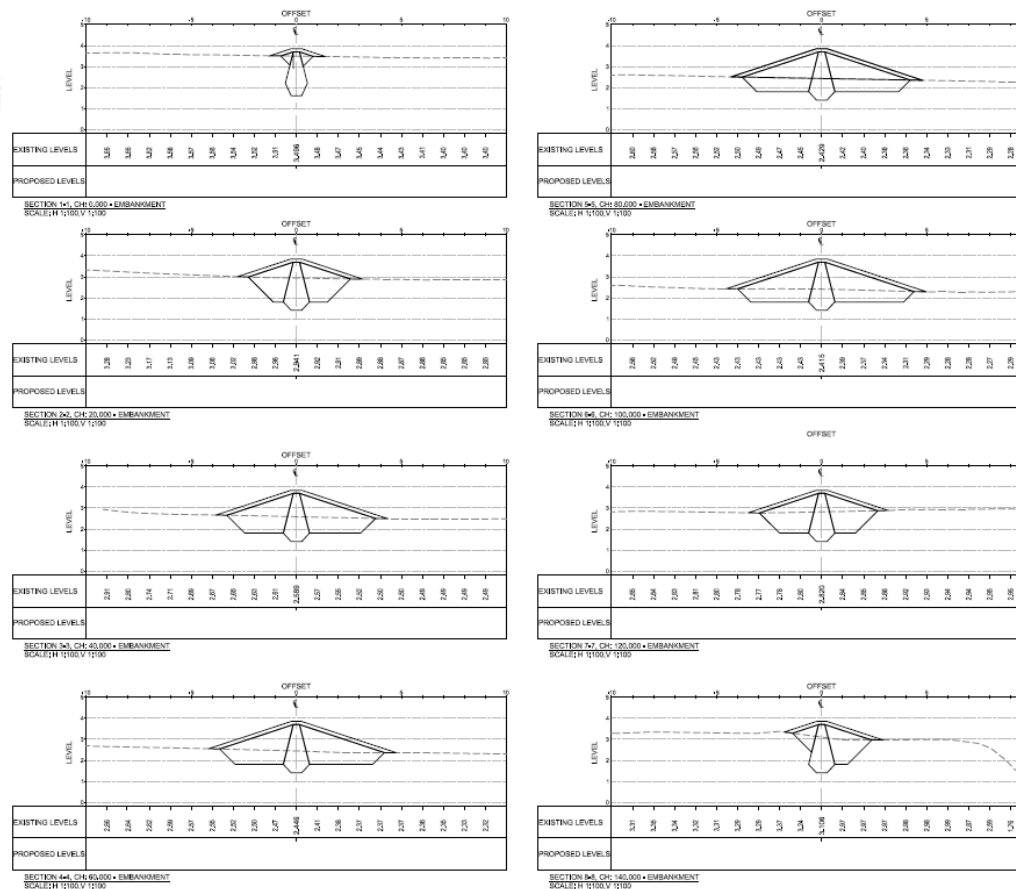
The site is a parcel of land located off Mill Lane, Langstone, Havant, PO9 1RX (centred on OS grid reference SU 71473 04903) (**Fig 1**). The site is bound by a residential property to the east, by Mill Lane to the north and the remainder of the field and coastal habitats to the southwest and south. In the wider environment, the site lies within the southwest corner of Langstone village on the edge of Langstone Harbour.

Figure 1. Redline boundary of the site (Google, 2025)



1.3 Development Proposals

The proposals entail the construction of a bund within the east of the field for flood defence purposes to a crest level of 3.85m and the installation of a small number of PU12 section piles at the southeast corner. In addition, a drain will be created under the bund to take water from the field through a French drain discharging to an existing ditch to allow the field to continue to drain (**Fig 2**).

[illegible]

2.0 METHODOLOGY

The methodology for the assessment follows the Natural England Statutory Biodiversity Metric habitat condition assessment protocols and uses the Statutory Biodiversity Metric calculation tool to calculate biodiversity losses and gains (DEFRA, 2023b, updated 2024).

2.1 Habitat Assessment

Habitats on site pre-development were identified in accordance with the categories specified for a UK Habitats survey, using Habitat Definitions Version 2.0 (UKHab Ltd., 2023). This was chosen as an appropriate habitat categorisation system as it fits within the Statutory Biodiversity Metric calculation.

A condition assessment, in line with the Statutory Biodiversity Metric Condition Assessment sheets, was carried out on the site on 1st October 2025 by Darla Brown BSc (Hons) ACIEEM and Laura Hardy AMRSB. The area of identified habitats is calculated in hectares (ha). The dominant habitat type was selected, according to those defined by UKHab Ltd (2023). Where there was disparity between the UK classification for habitat type and those present within the Statutory Biodiversity Metric calculator tool, this was noted within the condition assessment tables.

2.2 Habitat Distinctiveness

Each habitat was assigned a score for distinctiveness, according to the Statutory Biodiversity Metric calculator tool (DEFRA, 2023b, updated 2024). This ranged from Poor - High for most habitats, or Not Applicable. Using the tool, habitats were assigned a score based on their distinctiveness.

2.3 Habitat Condition

The condition of each habitat was assessed following criteria set out in the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2023b, updated 2024), which includes detailed assessment criteria for different habitats. Full results of the condition assessments can be found within **Section 3.0**. The condition of each habitat was assessed individually on site but, where the condition was found to be the same across several parcels, these were grouped together.

2.4 Strategic Significance

Each habitat was assigned a strategic significance in line with the Statutory Biodiversity Metric User Guide (DEFRA, 2023b, updated 2024). A search using the Havant Borough Council's Local Plan document identified that the site does not fall under any designations or ecological network and the site does not fall under any 'Areas that could become of particular importance for biodiversity (ACB)' within the draft Local Nature Recovery Strategy for Hampshire and as such all habitats were classified as 'area/compensation not in local strategy'.

2.5 Limitations

2.5.1 Survey timing

The survey was carried out late in the season for the identification of botanical interest species, which is outside the optimal period. However, given the nature of the species and habitats identified, it is not considered this was a significant limitation. Further, a previous PEA survey was carried out by Dr. Jonty Denton in September 2024 with a detailed species list provided and the botanical survey data of the site (collected June / July 2021) has been provided by Coastal Partners (2021) which has also been examined to inform the assessment. All assessments have consistently shown species-poor

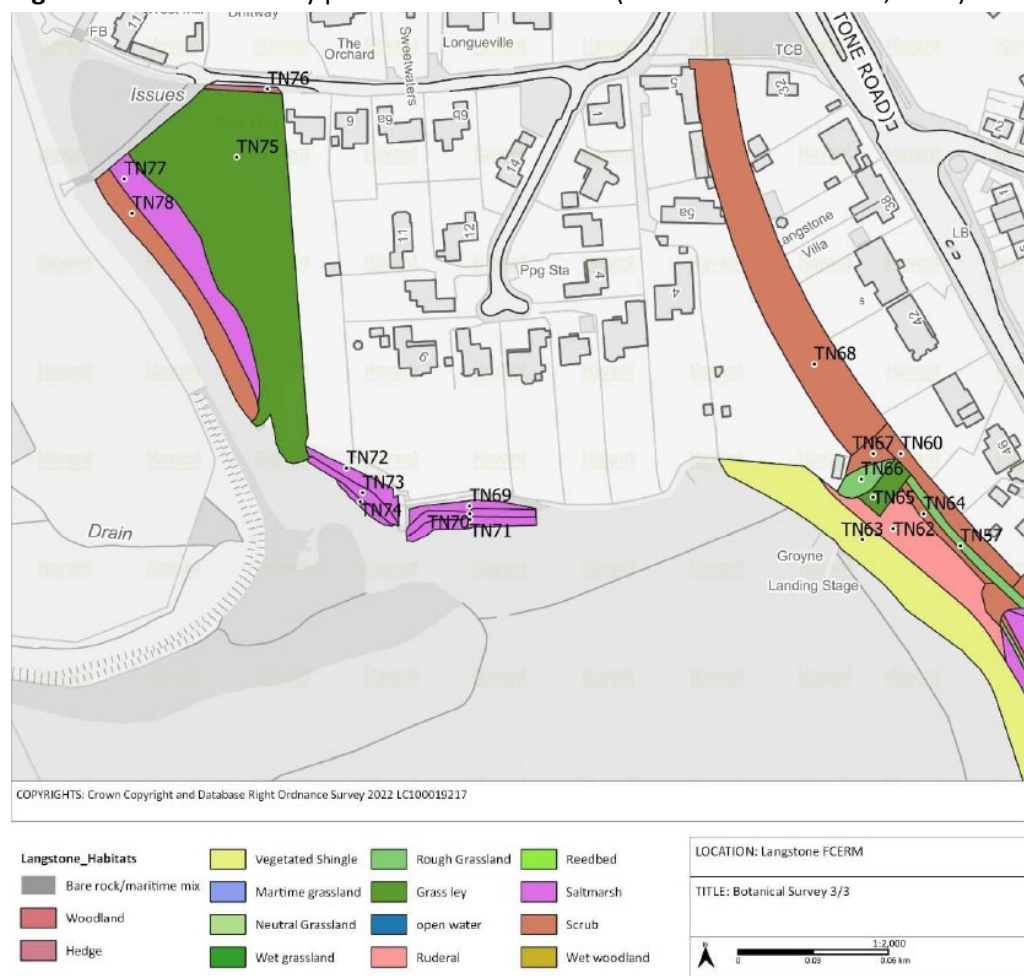
modified grassland that is dominated by grasses and therefore the condition assessment is considered accurate.

2.5.2 Recent impacts

At the south end of the site, there was ruderal habitat colonising on bare ground where impacts have recently been carried out as part of maintenance of a previous planning permission (Ref. 98/63172) to raise the height to the approved level. It is understood these repairs were confirmed with the council that they are still valid under the previous planning approval.

The previous botanical survey from 2021 identified this area as part of the grass ley (**Fig 3**). As the poor condition modified grassland field in the wider area has the same biodiversity value as the ruderal habitats, it is considered this is unlikely degradation of habitats and the areas impacted have been considered based on the area assessed at the recent site visit.

Figure 3. Botanical survey plan relevant to the site (from Coastal Partners, 2021)



3.0 EXISTING HABITATS AND DEVELOPMENT PROPOSALS

The habitats on site were categorised according to UK Hab Ltd. Habitat Definitions Version 2.0 (2023) as listed below (please refer to the **Baseline Habitats map appended** for information on the locations of these habitats on site):

- g4 – Modified grassland with scattered scrub (secondary code 10)
- secondary code 81 – Ruderal/ephemeral

The modified grassland (**Fig 4**) comprises of species such as Creeping Buttercup (*Ranunculus repens*), Meadow Buttercup (*Ranunculus acris*), Yorkshire Fog (*Holcus lanatus*), Sow Thistle (*Sonchus oleraceus*), Common Bent (*Agrostis capillaris*), Cow Parsnip (*Heracleum maximum*), Wild Carrot (*Daucus carota*), Common Fleabane (*Pulicaria dysenterica*), Gypsywort (*Lycopus europaeus*), Broadleaved Dock (*Rumex obtusifolius*), Creeping Thistle (*Cirsium arvense*), Ragwort (*Jacobaea vulgaris*), Creeping Bent (*Agrostis stolonifera*), and Bird's Foot Trefoil (*Lotus corniculatus*).

At the far south of the site, the area has been disturbed where a previous permission for a bund along the western area of the field has recently been managed to raise it to the approved level (**Fig 5**). This area is considered to be sparsely vegetated ruderal vegetation. Species noted in this section include Bristly oxtongue, Bramble, Yarrow (*Achillea millefolium*), Soft Rush (*Juncus effusus*) and Hedge Bedstraw (*Galium mollugo*).

At the location of the proposed piles at the southeast there is a very small section of Blackthorn (*Prunus spinosa*) scrub. However, this habitat only covers an area of 4m² and is too small to be considered separately.

Figure 4. Modified grassland, facing north



Figure 5. Ruderal vegetation to the south of the site with patch of Blackthorn scattered scrub



3.1 Baseline Condition Assessment

3.1.1 Modified grassland

The condition assessment for the modified grassland is shown in **Table 1**, the grassland is considered to be in poor condition.

Table 1. Condition Assessment for modified grassland.

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	No	Highly grass dominated field (including in the 2021 botanical survey) with well under 6 species 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	
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes	Scattered Blackthorn scrub within the site accounts for less than 20% of the area and is only present at the southeast
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	
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 <i>Pteridium aquilinum</i> is less than 20%.	Yes	No Bracken noted.
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	Yes	No invasive species noted.
Number of criteria passed			4
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved ×/✓	
Passes 6 or 7 criteria including passing essential criterion A	Good (3)		
Passes 4 or 5 criteria including passing	Moderate (2)		

essential criterion A			
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)	✓	

3.1.2 Ruderal/ephemeral

The condition assessment for the ruderal/ephemeral habitat is shown in **Table 2**, the habitat is considered to be in poor condition.

Table 2. Condition Assessment for ruderal/ephemeral habitat

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	No	
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	No	
C	Invasive non-native plant species (listed on Schedule 9 of WCA) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area. Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover)."	Yes	
Number of criteria passed			1
Condition Assessment Result (out of 6 criteria)	Condition Assessment Score	Score Achieved ×/✓	
Passes all 3 criteria; AND Meets the requirements for Good condition	Good (3)		

within criterion C.			
Passes 2 criteria	Moderate (2)		
Passes 0 or 1 criteria	Poor (1)	✓	

4.0 PROPOSED CREATED HABITATS & NET GAIN ASSESSMENT

4.1 On-Site Proposals

4.1.1 Habitats

Table 3 indicates those habitats due to be *created* on site with details provided, where appropriate, as to how the necessary condition criteria will be met if relevant. No habitat within the redline boundary is proposed to be retained.

Table 3. Non-linear habitats to be *created* on site including details as to the condition assessment criteria that must be met in order to achieve the targeted condition

Habitat Type	Action	Area (ha)	Target Condition	Condition Assessment Notes	Strategic Significance	Location Notes
Modified grassland	Created	0.102	Moderate	<p>Modified grassland of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). Specifically, criteria A, C, D, E, F and G will be targeted for achievement through planting of a species-rich native seed mix, although only 4 of these (including criterion A) are required to meet the targeted condition.</p> <p>It is recommended that the grass on the embankment is infrequently cut or as a minimum left uncut from mid-June through July to allow flowers to go to seed to retain species diversity.</p>	Area / compensation not in local strategy	The entirety of the proposed area

4.2 Metric Calculation

Following the incorporation of the above measures into the DEFRA Statutory Biodiversity Metric, **on site there is a net gain of +73.44% (or +0.15 units) in habitat and the trading rules are satisfied (Fig 5)**. It is considered there is no further habitat creation or offsetting required to meet BNG rules.

Figure 5. Screenshot of the 'headline results' output from the BNG assessment undertaken for the site using the DEFRA Statutory Biodiversity Metric.

FINAL RESULTS		
Total net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Area habitat units	0.15
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Area habitat units	73.44%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

5.0 CONCLUSION

A Biodiversity Net Gain Assessment was carried out by Ecosupport Ltd for the proposed development at Mill Lane, Langstone. This concluded that there is a net change of +73.44% for habitats and the trading rules are satisfied. With this, the site will meet the requirements for biodiversity net gain.

6.0 REFERENCES

DEFRA (2023b, updated 2024) *Statutory Biodiversity Metric Tools and Guides*. Available at: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

UKHab Ltd. (2023). *The UK Habitat Classification – Version 2.0*.

APPENDIX 1- MAPS

A – BNG Baseline Habitats



Legend

- Redline boundary
- Modified grassland (poor condition)
- Ruderal (poor condition)



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Map	Baseline Habitats Map
Site	Mill Lane Flood Defences
Client	Mr. Robert Carrell
Date	05/11/2025
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B – BNG Post-Development Habitats



Legend

 Redline boundary

 Modified grassland (moderate condition)



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Map	Proposed Habitats Map
Site	Mill Lane Flood Defences
Client	Mr. Robert Carrell
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