



## **Appendix E1 - BNG Statement Langstone FCERM Scheme**

February 2025

## ***Document Information***

|                   |                        |
|-------------------|------------------------|
| <b>Document</b>   | BNG Statement          |
| <b>Project</b>    | Langstone FCERM Scheme |
| <b>Department</b> | Coastal Partners       |

## ***Document History***

| <b>Date</b> | <b>Revision</b> | <b>Prepared</b> | <b>Checked</b> |
|-------------|-----------------|-----------------|----------------|
| 21/02/2025  | 1.0             | ER              | HJ/NR          |

## Contents

|    |                                   |   |
|----|-----------------------------------|---|
| 1. | Introduction .....                | 1 |
| 2. | Field Survey .....                | 2 |
| 3. | Biodiversity gain proposals ..... | 4 |
| 4. | Calculations.....                 | 8 |
| 5. | Management and monitoring .....   | 8 |

# 1. Introduction

Biodiversity Net Gain (BNG) is required as part of the planning application for the proposed Langstone Flood and Coastal Erosion Risk Management (FCERM) scheme to demonstrate measures taken to meet statutory BNG requirements. The Environment Act 2021 made a requirement for mandatory Biodiversity Net Gain which came into force in April 2024 for most development. The mandatory requirement is for a net gain of a minimum of 10%, as calculated from the baseline using the statutory metric tools created by the Department for Environment, Food and Rural Affairs (Defra) and Natural England (NE). This report constitutes a calculation of BNG at baseline and post intervention, for the Langstone FCERM scheme proposal.

**Figure 1.1** shows the red line boundary of the Langstone FCERM scheme. To support this BNG Statement a series of ecology surveys were undertaken for the Langstone FCERM Scheme as detailed in **Section 2**. An overview of the proposed net gain plan is then provided in **Section 3** followed by an overview of the output calculation from the metrics tool (**Section 4**) and proposed management and monitoring (**Section 5**).

This plan has been completed by Ed Rowsell who holds a BSc Hons in Ecology and has been a practising professional ecologist for over 25 years. Ed is also a member of the Association of Local Government Ecologists and an experienced habitat and botanical surveyor.

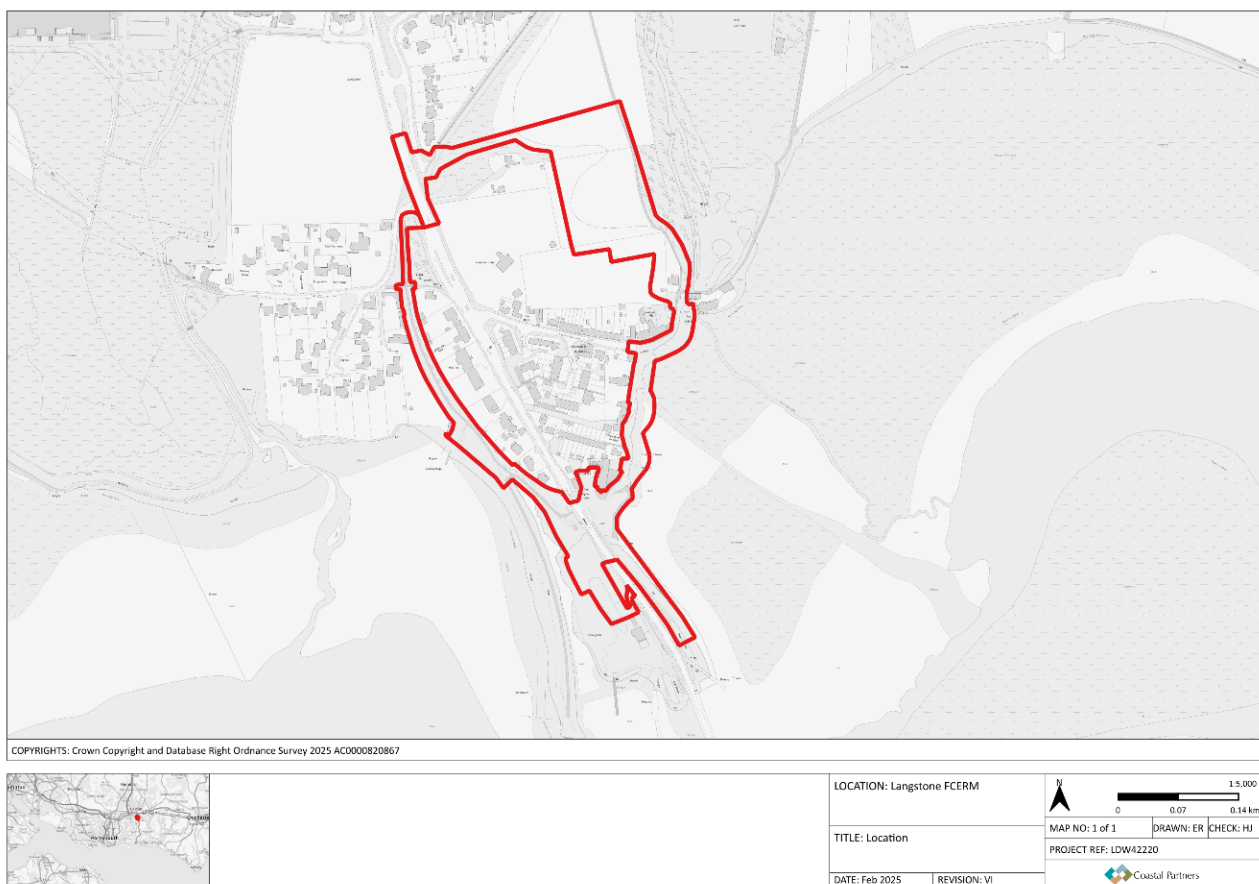


**Figure 1.1: Boundary of Langstone FCERM scheme**

## 2. Field Survey

A full botanical survey was undertaken in July 2021, which was followed up by habitat condition assessments to UKHab/BNG standard carried out in August 2024. The baseline habitat map is shown in **Figure 2.1**.

The habitats found within the redline boundary include;

- **Saltmarsh-** Both Upper Saltmarsh and Spartina Sward Saltmarsh are present within the site boundary, the latter of which is defined as an Irreplaceable Habitat in accordance with Column 1 of the Schedule in the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2023). The Upper Saltmarsh is present on the embankment at Frontage 2 and will see a very small section not retained (~ 0.0017ha), but the proposed design has been revised to minimise the habitat loss as far as technically possible. The Spartina Sward Saltmarsh is present on the foreshore within Frontage 4/5 and will be protected during construction, with no loss.
- **Scrub-** Scrub habitats of various types including hawthorn, mixed and bramble scrub are located within the site boundary a significant area of scrub will be removed to facilitate the construction of the FCERM scheme.
- **Littoral habitats-** various littoral habitats are present including mudflat, mixed sediments and coarse sediments, as the majority of these habitats are also within the SAC the encroachment into these habitats has been minimised, but some habitat losses are required.
- **Grassland-** Large areas of modified grassland is located within the main compound area, smaller areas of amenity grassland and neutral grassland. Small areas of loss and change of grassland habitats are required.
- **Wet woodland-** a small area of wet woodland runs adjacent to the scheme and a small area will be affected by the scheme.
- **Ruderal/ephemeral habitats-** a significant area of habitat that forms the interface between the scrub habitats and the littoral habitats on the western side of the scheme, did not easily fit into any habitat classification scheme, so have been categorised on the nature of the constituent species.

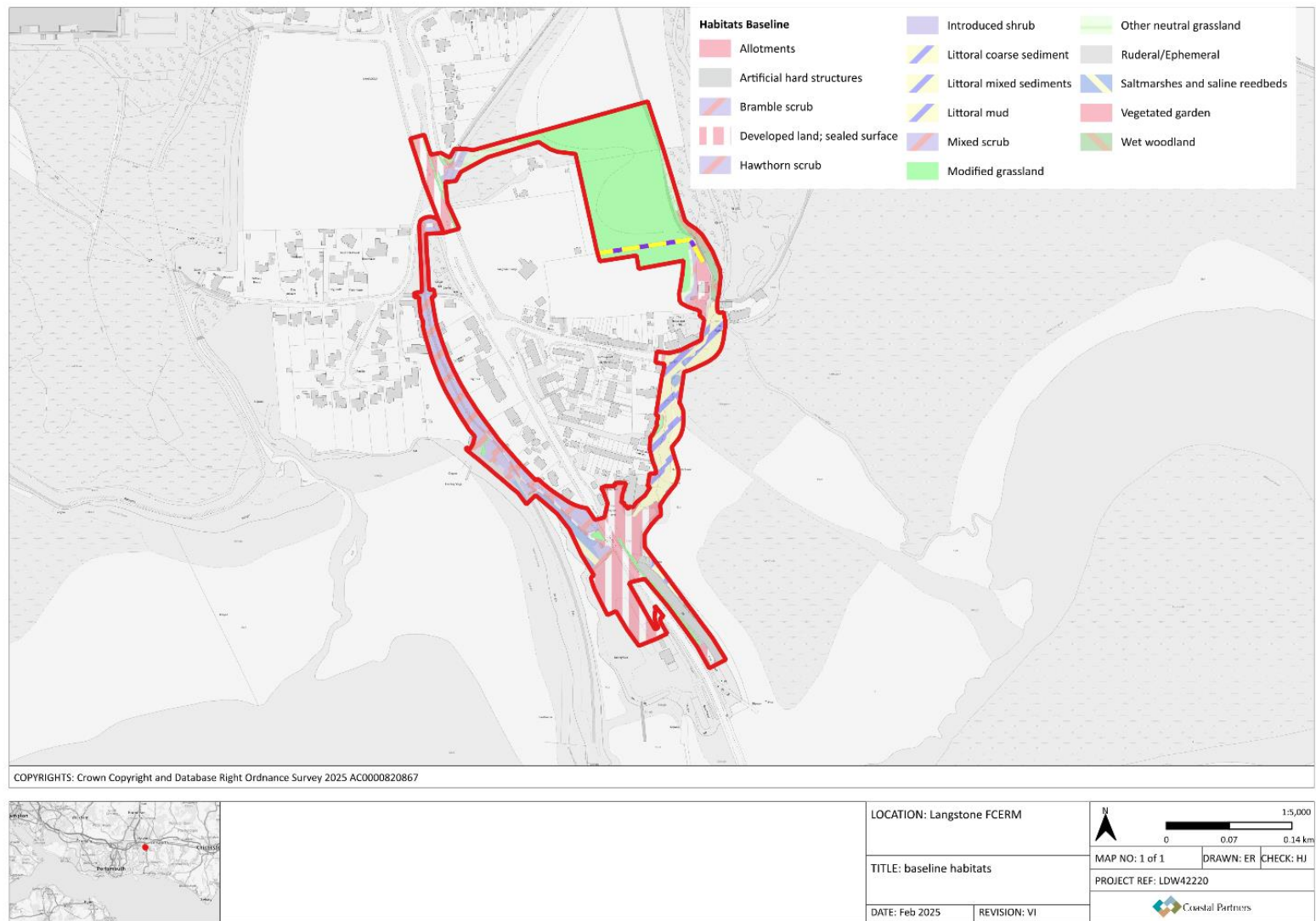


Figure 2.1: Baseline habitat map of Langstone FCERM

The existing habitats and the retained extents of these habitats are detailed in **Table 2.1** below.

**Table 2.1: Baseline habitat extents and retained area.**

| Habitat                         | Condition   | Extent (ha) | Retained (ha) |
|---------------------------------|-------------|-------------|---------------|
| Saltmarshes and saline reedbeds | Moderate    | 0.015       | 0.015         |
| Saltmarshes and saline reedbeds | Good        | 0.1302      | 0.1285        |
| Modified grassland              | Poor        | 2.0555      | 2.0267        |
| Other neutral grassland         | Good        | 0.0618      | 0.0618        |
| Other neutral grassland         | Fairly Good | 0.0911      | 0.0911        |
| Bramble scrub                   | N/A         | 0.0857      | 0.0753        |
| Hawthorn scrub                  | Good        | 0.0488      | 0.0471        |
| Hawthorn scrub                  | Moderate    | 0.0227      | 0.0227        |
| Hawthorn scrub                  | Poor        | 0.5242      | 0.1165        |
| Mixed scrub                     | Poor        | 0.0281      | 0.0049        |
| Artificial hard structures      | Moderate    | 0.0116      | 0.0116        |
| Artificial hard structures      | Poor        | 0.1556      | 0.1556        |
| Littoral coarse sediment        | Poor        | 0.2911      | 0.2512        |
| Littoral mixed sediments        | Fairly Poor | 5.0704      | 5.0704        |
| Littoral mud                    | Good        | 0.066       | 0.066         |
| Littoral mud                    | Moderate    | 0.25        | 0.25          |
| Ruderal/Ephemeral               | Moderate    | 0.0399      | 0.0399        |
| Ruderal/Ephemeral               | Poor        | 0.023       | 0.0161        |
| Allotments                      | Good        | 0.0156      | 0.0145        |
| Developed land; sealed surface  | N/A         | 2.2998      | 2.1765        |
| Introduced shrub                | N/A         | 0.0015      | 0.0015        |
| Vegetated garden                | N/A         | 0.0544      | 0.0538        |
| Wet woodland                    | Moderate    | 0.1074      | 0.0934        |

### 3. Biodiversity gain proposals

A landscaping scheme is proposed (see **Figure 3.1 (area units)** and **Figure 3.2 (hedgerow units)**) to be delivered alongside the construction of the FCERM scheme which is detailed below.

Habitats that will be created on the site can be seen in **Table 3.1** below but will include;

- **Other neutral grassland**- wildflower seed mixes and/or wildflower turf will be sown or laid on frontages 1A, 2, 3 and 5.
- **Mixed scrub**- to replace areas of scrub removed for the scheme, areas of native scrubs will be planted in frontage 1A and 2
- **Saltmarsh**- a significant area of saltmarsh area will be created at Frontage 2 due to the re-alignment of the existing footpath further landward, and will be through a combination of maritime grassland seed mix and natural regeneration / allowing space for rollback of saltmarsh with sea level rise.
- **Wet woodland**- to replace an area of wet woodland that will be lost to facilitate the scheme 24 suitable native species trees will be planted.
- **Native mixed species hedge**-27m of mixed native species hedge will be planted in the existing gaps on the.
- **Individual native trees**- 66 native trees of a variety of species will be planted within frontages 1A.

**Table 3.1: On-site habitat creation extents**

| <b>Habitat</b>                           | <b>Extent created (ha)</b> |
|------------------------------------------|----------------------------|
| Saltmarshes and saline reedbeds          | 0.0915                     |
| Other neutral grassland                  | 0.7314                     |
| Mixed scrub                              | 0.1244                     |
| Artificial unvegetated, unsealed surface | 0.0058                     |
| Developed land; sealed surface           | 0.1575                     |
| Vegetated garden                         | 0.0006                     |
| Wet woodland                             | 0.0977                     |
| Rural tree                               | 0.2687                     |



Figure 3.1: Post intervention habitat map of Langstone FCERM Scheme, reinstated (retained) habitats not shown.

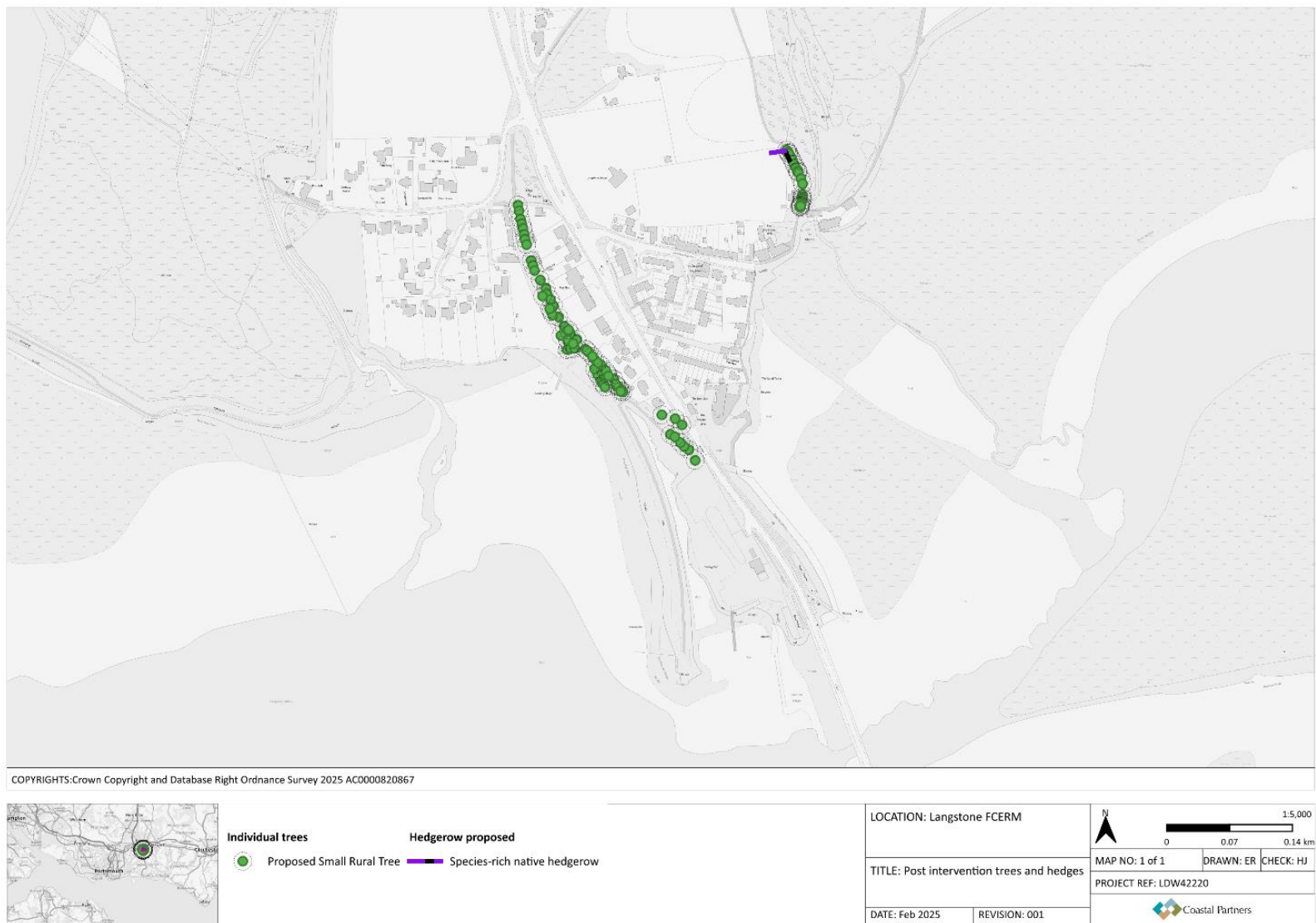


Figure 3.2: Post intervention hedge and tree map of Langstone FCERM Scheme, reinstated (retained) habitats not shown.

## 4. Calculations

Using the statutory metric tools created by DEFRA/NE, the baseline calculation for habitats within the redline boundary survey conclude the current value for area habitats as **70.92BU** (Biodiversity Units) and for hedges **0.81BU**. A copy of the completed metric has been provided separately.

Post intervention with the proposed landscaping delivered the area habitats are calculated to be valued at **78.14 BU** and hedge habitats **0.89 BU**. This results in a BNG of **10.19%** for area habitats and **10.83%** for hedge habitats. Therefore, it is considered that the mandatory requirement for a minimum of 10% BNG has been achieved and exceeded and this proposal is in compliance with the BNG Regulations.

The trading rules for area habitats are not technically met due to rules on habitat groups and distinctiveness, however it is felt the habitats proposed are the most suitable and represent the best option for the site for biodiversity net gain.

## 5. Management and monitoring

The habitats should be established and managed appropriately and protected for a minimum of 30 years to achieve the required net gain. A Habitat Mitigation and Monitoring Plan will be prepared which could be secured via condition, to ensure the habitats are entered into appropriate management and monitored in the long term and achieve the condition objectives set.

Overall, this BNG Statement is considered to demonstrate that the mandatory requirement for a minimum of 10% BNG has been achieved and the proposed scheme is in compliance with the mandatory BNG requirements.