



Whitecliff Lodge

Biodiversity Net Gain Assessment



Client: John Houlihan

Site Address: Whitecliff Lodge, Honeysuckle Close, North Lancing, BN15 0PF

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Summary

JAS Ecology undertook a baseline Biodiversity Net Gain (BNG) assessment of Whitecliff Lodge, Honeysuckle Close, North Lancing, West Sussex.

The Site comprises predominantly residential garden habitats associated with an existing dwelling and garden garage, including areas of urban developed land (sealed surface), artificial unvegetated unsealed surface and vegetated garden. These habitats are characteristic of a managed residential property. Baseline habitats were surveyed and classified in accordance with the UK Habitat Classification System (UKHab) and assessed using the Statutory Biodiversity Metric Small Sites Tool.

The proposed development consists of the demolition of an existing garden garage and the construction of a single dwelling within the residential curtilage. The scheme has been designed to retain existing vegetation where possible and provides opportunities for ecological enhancement through wildlife-friendly landscaping and the installation of bat and bird features.

Based on the information provided, the proposed development meets the qualifying criteria for the self-build and custom housebuilding exemption from the mandatory Biodiversity Net Gain requirement, namely that:

- The development comprises fewer than nine dwellings;
- The Site area is less than 0.5 hectares; and
- The proposed dwelling will be delivered as a self-build or custom-build dwelling in accordance with Section 1(A1) of the Self-build and Custom Housebuilding Act 2015.

It is therefore concluded that the development is exempt from the statutory requirement to demonstrate a minimum 10% Biodiversity Net Gain under Schedule 7A of the Town and Country Planning Act 1990 (as amended), subject to the self-build/custom-build status being confirmed by the applicant and accepted by the Local Planning Authority.

Introduction

1.1. Background Information

JAS Ecology was commissioned to undertake a baseline Biodiversity Net Gain (BNG) calculation and plan in relation to proposed works at Whitecliff Lodge, Honeysuckle Close, North Lancing, BN15 0PF (Hereafter referred to as the 'Site').

It is understood that the proposed development includes the demolition of a garden garage and the erection of one new dwelling in the south of the garden adjacent to the current house.

(The full scope of works is derived from FRESH Architects_Whitecliff Lodge) received on 02/06/2026).

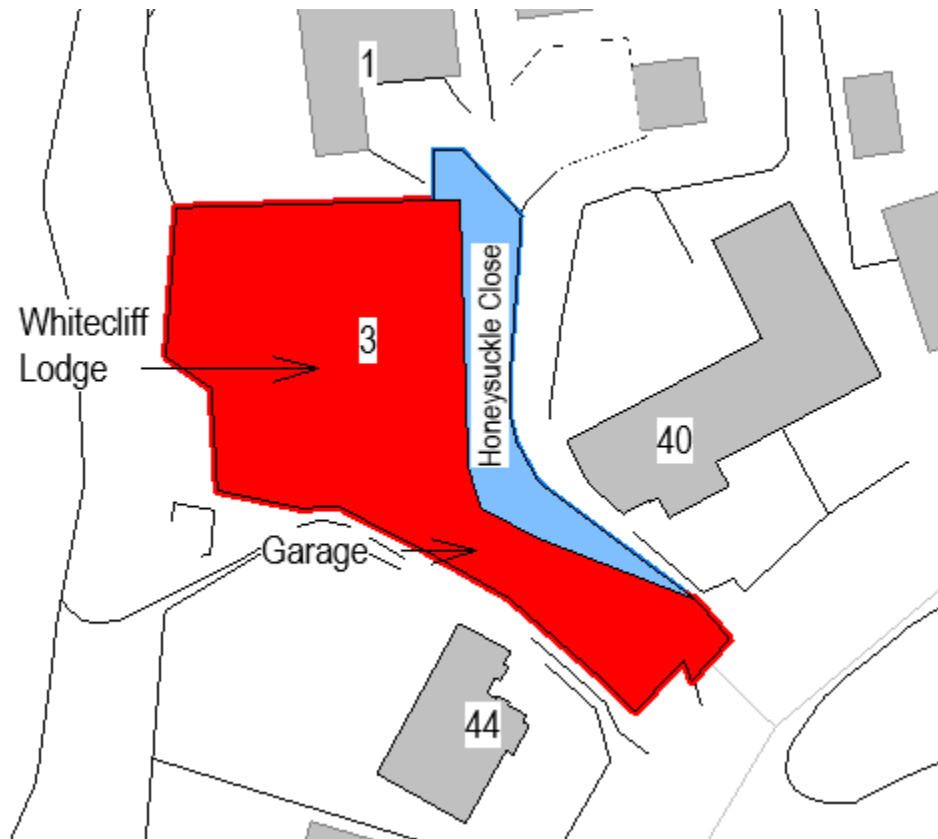


Figure 1. Map demonstrating red line boundary of Site

See Appendix 1 – Maps.



1.2. Location and Setting

The Site is located at National Grid Reference (NGR) TQ 17878 06025 in North Lancing, which forms part of the village of Lancing, West Sussex, located to the north east of the coastal town of Worthing.

Habitats within the Site comprised of buildings, a garden area with a sealed surface (garden paving) with some areas of ornamental planting within gravel.

The wider landscape comprises residential housing and streets to the south, woodland to the north, and a mosaic of arable fields and grassland with associated hedgerows and treelines in the wider southern landscape.

1.3. Relevant Legislation and Guidance

The main pieces of legislation regarding the protection of species and habitats in the UK are the Wildlife and Countryside Act, 1981 (as amended) and the Conservation of Habitats and Species Regulations, 2017 (as amended).

The Environment Act 2021 was granted Royal Assent on 9 November 2021 and contains provisions which will mandate achieving a 10% BNG for most developments. These provisions became mandatory in February 2024 for major developments and those requiring planning permission. The provisions legally require developers to ensure sites are improved for biodiversity with a minimum of 10% increase (at the discretion of local and district councils) in habitat value for wildlife compared with the pre-development baseline. All biodiversity enhancements will be expected to be maintained for a minimum of 30 years (UK Parliament, 2021. The Environment Bill).

Under the Natural Environment and Rural Communities (NERC) Act 2006, all public bodies are required to have regard to biodiversity conservation when carrying out their function. Under this act a list of habitats and species that are of principal importance for the conservation of biodiversity in England are published under Section 41 (S41).

Invasive non-native species are regulated via a combination of the Invasive Alien Species (Permitting and Enforcement) Order 2019 and Section 14, Schedule 9 of the Wildlife and Countryside Act, 1981 (as amended).

1.4. Planning Policies

The biodiversity policies which are most relevant are the National Planning Policy Framework (NPPF) 2023.



1.4.1. National Planning Policy Framework

This legislation sets out the Government's planning policies for England and how these are expected to be applied by Local Authorities within their Local Development Frameworks (LDF). The revised NPPF was published in December 2023.

The National Planning Policy Framework states that “planning policies and decisions should protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy”.

NPPF Section 15 requires Local Authorities in England to take measures to:

- Protect and enhance valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- Recognise the intrinsic character and beauty of the countryside, and wider benefits from natural capital and ecosystem services- including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodlands;
- Maintain the character of the undeveloped coast, while improving public access to it where appropriate;
- Minimising the impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- Preventing new and existing development from contributing to being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, considering relevant information; and
- Remediating and mitigation despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

1.5. **Biodiversity Net Gain and the DEFRA Metric**

Biodiversity is the variety of life on earth; it includes all living things and the places in which they live. It is essential to sustain our society, well-being and economy. Biodiversity in the UK and internationally is declining as it comes under increasing pressure from development and land management practices. Enhancing biodiversity is integral to sustainable development, and BNG is an approach to development which leaves the natural environment in a measurably better state than beforehand.



In 2023 Defra published the Statutory Biodiversity Metric ('the Metric') (Natural England, 2025a), which has subsequently been updated. The metric provides a means of evaluating biodiversity losses and gains through development in a robust and consistent manner. The metric enforces the mitigation hierarchy whereby impacts to biodiversity should first be avoided, then minimised and mitigated, before being compensated where losses cannot be avoided. The Metric calculates the biodiversity value of a site before and after development to establish the change in biodiversity attributable to a particular development project.

1.6. Quality Assurance and Environmental Management

All ecologists involved in the production of this report are members of Chartered Institute of Ecology and Environmental Management (CIEEM) and are bound by its code of professional conduct.

All ecologists involved in this production of this report have experience with completing BNG calculations and are considered competent under British Standard BS 8683:2021, the technical standard for designing and implementing BNG . The qualifications and experience of the BNG assessors are set out in the competency statement (Table 1).

Table 1. Surveyor Competency

Ecologist	Qualifications	Experience
Jasmine Stemp - Surveyor and report write up	BSc, MSc, ACIEEM, Level 1 CL08 Great Crested Newts.	Six years' experience in ecological consultancy working with BNG for both small- and large-scale development projects using BNG metrics 3.0, 3.1, 4.0, statutory metric and small sites metric.

1.7. Purpose of Report

The purpose of this report is to

- Provide biodiversity net gain pre-development baseline calculations;
- Provide pre-development baseline habitat map; and
- Outline the reasonable biodiversity enhancement measures that will be put in place post-development.

Methodology

2.1. Overview

The BNG assessment has been carried out using the Defra small sites Biodiversity Metric and accompanying The small sites metric (statutory biodiversity metric) User Guide. The Metric uses habitats as a proxy for wider biodiversity with different habitat types scored according to their relative biodiversity value. This value is then adjusted depending on the condition and location of the habitat, to calculate 'Biodiversity Units' (BU) for the specific development site. Pre-intervention BU are subtracted from the post-intervention BU to determine the change in biodiversity value attributable to the development.

There are four key steps to using the Metric which are illustrated in [Figure 2. Key steps to apply the DEFRA metric](#) and described further in the following sections.

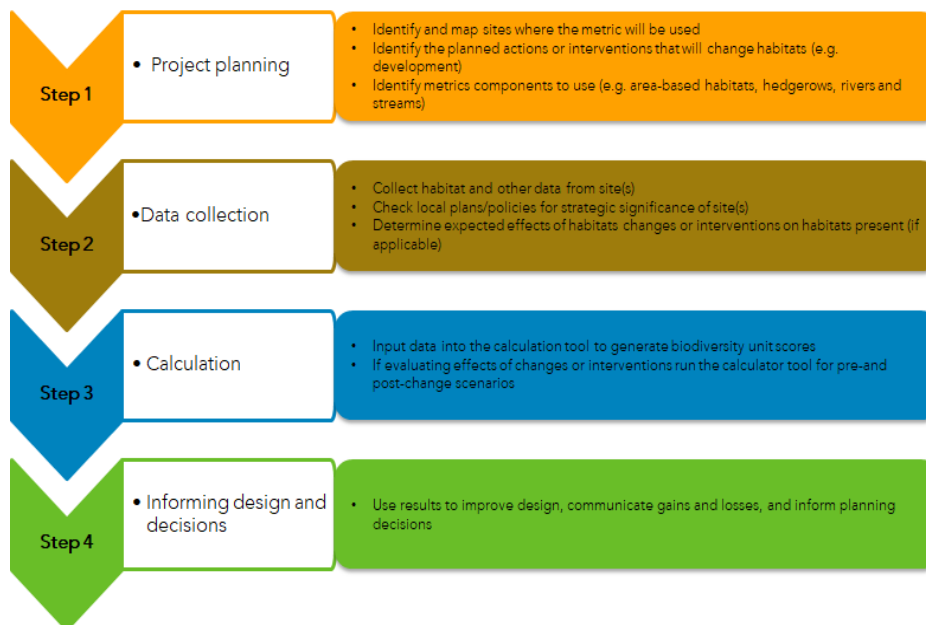


Figure 2. Key steps to apply the DEFRA metric

2.2. Project Planning (Step 1)

The development site for which the BNG assessment has been undertaken includes the red line boundary shown on Appendix 1 – Maps. The existing habitats within the development site include habitats units and hedgerow units and both components have been applied. This is discussed further in Section 3.

2.3. Data Collection (Step 2)

Pre-development habitats



An experienced ecologist (See [Table 1. Surveyor Competency](#)) visited Site on 12th May 2026 to identify the habitats according to the UK Habitat Classification System (UKHab Ltd, 2024). The site was divided into land parcels, based on the different habitats present. For each habitat, lists of plant species (where applicable) were also recorded, as well as an indication of their relative frequency and abundance (using the DAFOR scale). The divergence from this methodology is in relation to individual trees, whereby these features are recorded and mapped separately from the baseline habitat that they sit within. The surveys established the extent and classification of habitats on Site.

Annotated field maps were then digitised in QGIS to produce the UKHab Pre-development plan shown at Appendix 1 – Maps. Each habitat polygon was clipped to the red line planning application boundary, and its area then calculated in GIS and exported to MS Excel for use in BNG baseline calculations. The size of each habitat parcel was recorded in Square Metres (m²).

The condition assessment of each habitat was not required during this survey due to the development falling under the small sites metric which scores habitats with a fixed score.

2.4. UK Habitat Classification

The following habitats were identified within the survey area and are shown on the UKHab plan at [Appendix 2 – Biodiversity Net Gain Habitat Map](#). The habitats are described below broadly in the order of their extents.

Urban – Developed land; sealed surface (397.50m²)

Developed land was present throughout the Application Site in the form of sealed surfaces associated with the existing dwelling, garden garage and surrounding hardstanding. This habitat comprised the main residential property, an ancillary garden garage and areas of impermeable concrete paving. Vegetation was absent across these areas due to the presence of built structures and sealed surfaces, with the habitat dominated by hardstanding and structural features. The buildings and adjoining hardstanding form the built footprint of the Site and provide negligible vegetative cover.

Urban - Artificial unvegetated, unsealed surface (276.00m²)

Artificial unvegetated unsealed surface was recorded within the Application Site, comprising areas of gravel associated with the residential garden. Scattered ornamental planting was present throughout, including palm trees (*Trachycarpus fortunei*). The substrate was generally well compacted, resulting in limited opportunities for the establishment of vegetation. The habitat was otherwise characterised by exposed gravel and loose aggregate material.

Urban – Vegetated garden (104.00m²)

An area of vegetated garden was present to the rear of the existing dwelling. The habitat comprised predominantly ornamental planting typical of a well-maintained residential garden. Species recorded included pear *Pyrus communis*, apple *Malus domestica*, bamboo *Bambusoideae* spp., palm tree *Trachycarpus fortunei*, giant onion *Allium giganteum*, forget-me-not *Myosotis* spp., cherry laurel *Prunus laurocerasus*, three-cornered leek *Allium triquetrum*, stinking iris *Iris foetidissima*, Mexican orange blossom *Choisya ternata*, garlic mustard *Alliaria petiolata*, rosemary *Salvia rosmarinus* and honeysuckle *Lonicera periclymenum*. The habitat was regularly managed and maintained as part of the residential curtilage.

2.5. Calculation (Step 3)

The Metric is accompanied by a calculation tool which uses a number of input fields in order to calculate pre- and post-intervention biodiversity units, including:

- Habitat types: as described in the UK Habitat Classification System.
- Area of habitats and length of hedgerows: in hectares and kilometres.
- Habitat condition: under the Small Sites Metric, habitat condition is not subject to site-specific assessment and is instead pre-assigned based on the selected habitat type. This removes the requirement for detailed condition scoring, with standard condition values applied within the Metric.
- Strategic significance: the idea of strategic significance works at a landscape scale. It gives additional unit value to habitats that are located in preferred locations for biodiversity and other environmental objectives as set out in published local plans.

Habitat type and area / length were established via the site survey.

Habitat condition was determined through the application of the Small Sites Metric pre-assigned condition values associated with each habitat type, rather than site-specific condition assessment.

The Calculation Tool also includes a number of pre-assigned fields which are automatically populated based on habitat type inputs:

- Habitat distinctiveness: based on an assessment of the distinguishing features of a habitat or linear feature, including consideration of species richness, rarity (at local, regional, national and international scales), and the degree to which a habitat supports species rarely found in other habitats.
- Risk multipliers (post-intervention only): two different risks are recognised in the Metric: difficulty of habitat creation and restoration, and temporal risk, i.e. the time taken for a newly created habitat to reach target condition.

Calculation of Biodiversity Units



Using the factors described above, equivalent Biodiversity Units (BU) were calculated for the development site pre- and post-intervention. No offsite habitat creation or enhancement is currently proposed.

The following formula was used to calculate the change in BU as a consequence of the Proposed Development:

$$\text{POST-INTERVENTION BIODIVERSITY UNITS} - \text{PRE-INTERVENTION BIODIVERSITY UNITS} \\ = \text{CHANGE IN BIODIVERSITY UNITS}$$

Where the resulting score is negative, there is a net loss in biodiversity. If the score is zero, there is no net loss in biodiversity. Where the resulting score is positive, there is a net gain in biodiversity.

2.6. Informing Design and Decisions (Step 4)

In this case the project layout was designed following detailed liaising with the project team. This ensured that BNG was considered during the design phase and landscaping plans were constructed to maximise the potential for on-site gains. The BNG calculations therefore provide an overview of realistic net gains or losses resulting from the scheme.



Results

3.1. Baseline Biodiversity Value

The baseline biodiversity value of the Site was calculated using the Statutory Biodiversity Metric Small Sites Tool. Habitats present within the Site comprised developed land (sealed surface), artificial unvegetated unsealed surface, and vegetated garden.

The Site is heavily modified and largely associated with residential curtilage, garden areas and areas of hardstanding. As such, the baseline biodiversity value of the Site is relatively low and reflects the limited ecological value of the existing habitats.

The **total baseline biodiversity value was calculated as 0.0208 biodiversity units**, as derived from the completed Small Sites Metric calculation (Appendix X).

A summary of the habitat areas is as follows:

- Developed land (sealed surface): 397.50 m²
- Vegetated garden: 104.00 m²
- Artificial unvegetated unsealed surface: 276.00 m²

3.2. Proposed Development

The proposed development comprises the demolition of an existing garden garage and the construction of a single dwelling within the southern portion of the existing residential curtilage.

The design retains the residential garden character of the Site, with the majority of existing garden areas and boundary vegetation retained where practicable. No significant loss of habitat is anticipated beyond localised construction footprint impacts associated with the new dwelling and access arrangements.

Following completion of the development, the Site will continue to comprise a mixture of residential garden and hardstanding habitats, with opportunities for ecological enhancement incorporated through soft landscaping and wildlife-friendly planting.



Biodiversity Net Gain Exemption Assessment

The Environment Act 2021 and associated Biodiversity Gain Requirements (Exemptions) Regulations identify exemptions from the mandatory Biodiversity Net Gain requirement for certain forms of development, including self-build and custom housebuilding developments.

To qualify for this exemption, all of the following criteria must be met:

- The development must consist of no more than nine dwellings;
- The development must be located on a site no larger than 0.5 hectares;
- The development must consist exclusively of dwellings that are self-build or custom housebuilding as defined under Section 1(A1) of the Self-build and Custom Housebuilding Act 2015.

The proposed development at Whitecliff Lodge comprises the construction of a single dwelling within an existing residential plot. The Site area is substantially less than 0.5 hectares.

Subject to confirmation by the applicant that the dwelling will be delivered as a self-build or custom-build dwelling in accordance with Section 1(A1) of the Self-build and Custom Housebuilding Act 2015, the development satisfies the exemption criteria outlined above.

4.1. Biodiversity Enhancement Measures

Although the development is considered exempt from the statutory Biodiversity Net Gain requirements, the following measures are recommended to provide ecological enhancement within the Site:

- Planting of native and wildlife-friendly ornamental species within garden areas;
- Installation of one integrated bird nesting feature;
- Installation of one integrated bat roost feature;
- Incorporation of pollinator-friendly planting within landscaped areas;
- Sensitive management of retained garden habitats to encourage structural diversity and ecological value.

These measures will provide opportunities for nesting birds, bats, invertebrates and other species associated with residential environments, and will contribute to local biodiversity enhancement.



Appendix

Appendix 1 – Maps

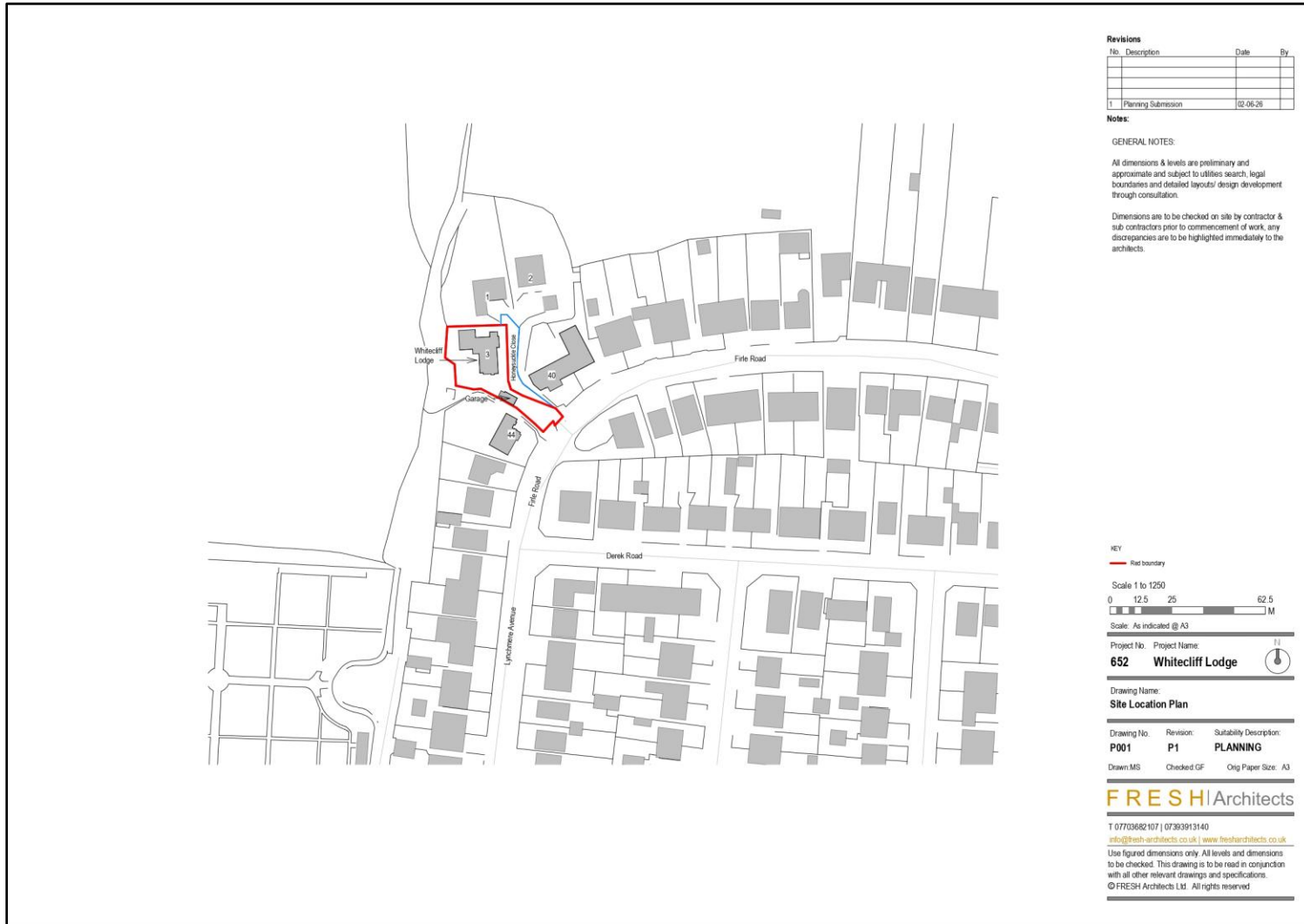


Figure 3. Drawings received from FRESH Architects



Figure 4. Drawings received from FRESH Architects

Appendix 2 – Biodiversity Net Gain Habitat Map



Figure 5. UKHabs BNG Map



Appendix 3 – Site Photos



Figure 6. Outside of house



Figure 7. Back of house



Figure 8. Garden garage



Figure 9. Driveway



Figure 10. Decking area



Figure 11. Decking with planted trees



Figure 12. Vegetated garden



Figure 13. Vegetated garden



Figure 14. Gravel garden



Figure 15. Concrete slabbed garden