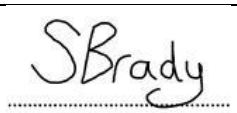
BIODIVERSITY NET GAIN DESIGN STAGE ASSESSMENT

OCTOBER 2024

AFG Wythenshawe, Millbrook
57 Wastdale Road
Wythenshawe
Manchester
M23 2RX

URBAN GREEN

QUALITY MANAGEMENT

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Prepared By:	Shannon Brady	**Signature:**		**Qualifications:**	Senior Biodiversity Net Gain Consultant, MSc
Checked By:	Tafara Musonza	**Signature:**		**Qualifications:**	Assistant Biodiversity Net Gain Consultant, BSc

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1 Executive Summary

1.1.1.1 Alternative Futures Group is proposing to develop land at Millbrook Independent Hospital, Wythenshawe (hereafter referred to as 'the site'). It is proposed to expand the existing site by the addition of an extension to the west of the Millbrook Independent Hospital.

1.1.1.2 Urban Green has been instructed to carry out a Biodiversity Net Gain Design Stage Assessment to support a full planning application for the development of the site.

1.1.1.3 This assessment was conducted using the Statutory Biodiversity Metric to calculate the pre- and post-development biodiversity habitat units of the site for the proposed development.

1.1.1.4 The current landscape proposals for the development of the site produce a 0.1 unit (31.66%) net gain in area habitats. No other habitat types were present on site. All trading rules have been satisfied by the landscape proposals.

1.1.1.5 Consequently, the development meets all local and national planning policy and off-site mitigation will not be necessary.

1.1.1.6 To ensure that the habitats proposed as part of the post-development design of this site reach the condition detailed within this report and the full gain in value to the environment is achieved by this site, a long-term management plan (usually 30 years) is required.

1.1.1.7 This management plan is provided by Urban Green (Urban Green, 2024a) as a separate document and covers the recommended management practices for the proposed habitats discussed in this report.

2 Introduction

2.1 Scope

2.1.1.1 Urban Green has been instructed by Alternative Futures Group to carry out a Biodiversity Net Gain Assessment at Millbrook Independent Hospital, Wythenshawe (hereafter referred to as 'the site') and produce the findings in a report.

2.1.1.2 It is proposed to expand the existing site by the addition of an extension to the west of the Millbrook Independent Hospital.

2.2 Site Context

2.2.1.1 The site is located at National Grid Reference SJ 81007 87770 and comprises a total area of approximately 0.14ha (see Figure 1).

2.2.1.2 The site comprises the eastern extent of the Millbrook Independent Hospital site in the Wythenshawe area of south Manchester. It is situated within a residential area, with the Wythenshawe hospital complex to the northwest, and a broad strip of agricultural land to the west and southwest. Access to the site is via Wastdale Road.



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Legend:
Red Line Boundary

0.4
Kilometers

N

Client: Alternative Futures Group	Issue: 01	
Project: Wythenshawe AFG	Scale @ A4: 1:5,000	
Title: Site Context	Approved by: HM	Checked by: HL
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URBAN GREEN

A: Ground Floor, The Tower, Deva City Office Park, Trinity Way, Manchester M3 7BF

T: +44 (0) 161 312 3131

weareurbangreen.co.uk

2.3 Purpose of Report

2.3.1.1 The report has been produced to document the methods, results and conclusions of a BNG Design Assessment that was undertaken on site. The advice herein is based on both desk and field-based studies and intends to fulfil the following purposes:

- Ensure the core principles of Biodiversity Net Gain including the mitigation hierarchy are applied;
- Identify the baseline habitats present on site (pre-development), assess the condition and provide an indication of the ecological value of those habitats;
- Identify the post development habitats present on site, assess the possible target condition and provide an indication of the likely importance of those habitats; and
- Calculate the overall change in biodiversity score from pre- to post-development habitats (measured as habitat units).

2.4 Planning Context

2.4.1.1 In England, a minimum of 10% BNG is mandatory under Schedule 7A of the Town and Country Planning Act 1990, for all new planning applications (Appendix 1).

2.4.1.2 Manchester City Council adopted a local plan in 2012, which will remain in place until 2027. While this document does not directly reference Biodiversity Net Gain, Policy EN 15 (Biodiversity and Geological Conservation) states:

Developers will be expected to identify and implement reasonable opportunities to enhance, restore or create new biodiversity, either on-site or adjacent to the site, contributing to linkages between valuable or potentially valuable habitat areas where appropriate.

2.4.1.3 This policy has been superseded by the Places for Everyone Policy JP-G8: A Net Enhancement of Biodiversity and Geodiversity. The policy states:

Development will be expected to:

a. Follow the mitigation hierarchy of:

i. Avoiding significant harm to biodiversity, particularly where it is irreplaceable, through consideration of alternative sites with less harmful impacts, then

ii. Adequately mitigating any harm to biodiversity, then

iii. Adequately compensating for any remaining harm to biodiversity

b. Avoid fragmenting or severing connectivity between habitats;

c. Achieve a measurable net gain in biodiversity of no less than 10%

d. Make appropriate provision for long-term management of habitats and geological features connected to the development;

2.4.1.4 Greater Manchester Combined Authority (GMCA) have also produced guidance relating to Biodiversity Net Gain within the 10 GM boroughs and set out a 10% target:

The minimum level of Biodiversity Net Gain is considered to be achieved when the biodiversity units for the habitats (for example, area based habitats, rivers and/or hedges)

impacted by the development is increased by 10% or more after the development. If the calculations indicate that a net gain will not be delivered at this stage, either the design should be updated or additional areas for habitat compensation identified (either onsite or outside the development boundary).

3 Methods

3.1.1.1 The Biodiversity Net Gain Assessment and Report follows the user guidance produced by Department for Environment, Food and Rural Affairs (2024a) and the good practice methodology as detailed within the *Biodiversity Net Gain: Good Practice Principles for Development* (Baker, et al., 2019).

3.2 Site Mapping

3.2.1 Existing Habitats

3.2.1.1 The site was subject to a field survey on the 29th May 2024, by Shannon Brady, Senior Biodiversity Net Gain Consultant. The weather conditions were 14°C, dry, 8/8 oktas, with wind speed 2 Beaufort scale.

3.2.1.2 Plant species were identified and recorded, flora species listed as protected in the Wildlife and Countryside Act 1981 (as amended) and species which are indicators of important and/or uncommon habitats, were searched for during the survey. Any invasive species, including those listed on the revised (April 2010) Schedule 9 of the Wildlife and Countryside Act 1981 and the Invasive Alien Species (Enforcement and Permitting) Order 2019 were also searched for during the field survey.

3.2.1.3 Habitat types were identified and recorded using the Coreo habitat mapping application (V2.0) which utilises UKHab classifications (Butcher et al., 2023) Habitat types were based on the UKHab guidance provided and the assessor's best judgment while using these guidelines.

3.2.1.4 These habitats were subsequently mapped using ESRI ArcGIS Pro software, and habitat areas and lengths were calculated to demonstrate habitats within the proposed development and the surrounding area. Habitats were identified using primary codes and additional secondary codes have been used to record further information regarding various aspects of the site. The baseline habitat map is displayed in Appendix 2. A summary of primary and secondary codes can be found in Appendix 3.

3.2.2 Post-Development Habitats

3.2.2.1 The landscape proposals as provided by Urban Green (Urban Green, 2024c) (see Appendix 4) were provided in PDF and DWG format, detailing planting mixes and the areas of the proposed habitats. These were used to categorise the proposed habitats to inform the assessment.

3.3 The Statutory Biodiversity Metric

3.3.1.1 The BNG calculation was undertaken utilising The Statutory Biodiversity Metric from the Department for Environment, Food & Rural Affairs, using data obtained from the field surveys.

3.3.1.2 The calculation was performed by a technically competent and experienced person as detailed in British Standard BS8683 - Suitably qualified person – definition in BS8683:2020.

3.3.1.3 The Statutory Biodiversity Metric uses habitat features as a proxy measure for capturing the value and importance of nature. The metric considers the size, ecological condition, location

and proximity to nearby 'connecting' features. The metric enables assessments to be made of the present and forecast future biodiversity value of a site.

3.4 Habitat Scoring

3.4.1.1 The Statutory Biodiversity Metric supplies reference documents and user guides to accurately evaluate and assess the different habitats on site. The methodology for the baseline and post development calculations are demonstrated in the following sections.

3.4.2 Minimum Mapping Units (MMU)

3.4.2.1 The UKHab classification system can be applied at various levels – fine scale, suitable for smaller sites, and large scale, used for broader landscapes. The fine scale level, which acknowledges areas of minimum 25m² and lengths of 5m, is considered appropriate for this site.

3.4.3 Baseline Units

3.4.3.1 To assess the quality of a habitat, and therefore calculate the units scored, the Statutory Biodiversity Metric utilises three scoring factors detailed as follows:

3.4.3.2 Condition

3.4.3.3 The condition of a habitat is assessed utilising the Condition Sheets provided for each habitat type (Department for Environment, Food & Rural Affairs, 2024b). These list positive indicators for each habitat and indicate how many of these indicators need to be present to meet certain thresholds of condition.

3.4.3.4 Condition assessment results can be found in the 'user comments' section of the associated Statutory Biodiversity Metric (Urban Green, 2024b).

3.4.3.5 Distinctiveness

3.4.3.6 The distinctiveness of each habitat is automatically assigned by the tool, based upon national records of the occurrence and rarity of each habitat. Table 1 provides the basis of the distinctiveness assessment for area habitats.

Table 1 – Distinctiveness Assessment for Habitats

Distinctiveness Categories		
Category	**Scores**	**Multiplier**
Very High	8	Priority habitats as defined in Section 41 of the Natural Environment and Rural Communities (NERC) Act that are highly threatened, internationally scarce and require conservation action e.g. blanket bog.
High	6	Priority habitats as defined in Section 41 of the NERC Act requiring conservation action e.g. lowland fens.
Medium	4	Semi-natural habitats not classed as a Priority Habitat.
Low	2	Habitat of low biodiversity value. Temporary grass and clover ley; intensive orchard; rhododendron scrub.
Very Low (hedgerows)	1	Lowest biodiversity value possible e.g. non-native and ornamental hedgerow

Distinctiveness Categories		
Category	**Scores**	**Multiplier**
Very Low (area and watercourse)	0	Little or no biodiversity value e.g. hard standing or sealed surface.

3.4.3.7 Strategic Significance

3.4.3.8 The idea of strategic significance works at a landscape scale. It gives additional unit value to habitats that are in preferred locations for biodiversity and other environmental objectives. Strategic significance utilises published local plans and objectives to identify local priorities for targeting biodiversity and nature improvement, such Nature Recovery Areas, local biodiversity plans, National Character Area 14 objectives and green infrastructure strategies (see Table 2).

Table 2 – Strategic Significance Assessment for Habitats

Strategic Significance Categories	
Category	**Score**
High strategic significance Identified in Local Nature Recovery Strategy (LNRS) and delivers specified priorities, or identified local plans as ecologically important	1.15
Low Strategic Significance Definitions for high or medium not met, i.e., does not deliver specific priorities outlined in LNRS/local plans	1

3.4.3.9 The site does not form part of any statutory or non-statutory designation.

3.4.3.10 None of the habitats on site are identified within the Greater Manchester Local Biodiversity Action Plan (GM BAP). There are no priority habitats identified on MAGiC map. Therefore, all existing and proposed habitats have been allocated a **low strategic significance.**

3.4.4 Greater Manchester Local Nature Recovery Strategy

3.4.4.1 The formal Greater Manchester Local Nature Recovery Strategy (GM LNRS) is currently in development and was not available to inform this assessment.

3.5 Constraints to the Survey

3.5.1.1 Whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment.

3.5.1.2 Best possible effort was made during the mapping process to ensure that the habitat map accurately represents the area of habitats present on site. Some margin of error is possible due to the continuous and difficult to define nature of habitat boundaries, however this margin of error has been minimised using professional opinion of experienced ecologists and

up to date aerial imagery. As such this is not expected to be a significant constraint and affect the overall Biodiversity Net Gain Calculation provided within this report.

3.5.1.3 The conclusions and recommendations detailed in this report are based upon the site redline boundary and the development proposals as outlined by the client at the time of writing. Should there be any changes to the site redline boundary or development proposals at a later stage, this assessment should be reviewed to determine whether any amendments or additional survey work is required.

3.5.1.4 The habitat to the east has been identified retrospectively as recent clearance has changed the habitat type present (see Section 4.2.3). The classification has been allocated based on aerial imagery, the character of similar adjacent habitats and verbal information provided by staff at the site. However, without recent survey data, comprehensive species lists, there is a possibility of baseline data being unreliable and habitats being undervalued.

4 Pre-Development Habitat Assessment

4.1.1.1 Habitat descriptions and condition assessment scores from the metric are provided below. The habitats have been given reference numbers for clarity regarding in-text and the metric calculation (Urban Green, 2024b) illustrates the numerical data. Photographs are provided in Appendix 5.

4.2 Area Habitats

4.2.1 1 & 2) Modified Grassland (g4 106)

4.2.1.1 Two parcels of modified grassland were present within the site boundary (photograph 1). Another parcel was present to the north but was below minimum mapping unit.

4.2.1.2 The grassland formed amenity spaces used by residents and was maintained to a short sward height. Species recorded within the grassland include white clover (*Trifolium repens*), Yorkshire fog (*Holcus lanatus*), ragwort (*Jacobaea vulgaris*), creeping buttercup (*Ranunculus repens*), black medick (*Medicago lupulina*), red fescue (*Festuca rubra*), meadow grass (*Poa* sp.), sweet vernal grass (*Anthoxanthum odoratum*), dandelion (*Taraxacum* agg.), great willowherb (*Epilobium hirsutum*), common daisy (*Bellis perenis*) and common plantain (*Plantago major*).

4.2.1.3 The grasslands have been assessed as **good** condition.

4.2.2 3) Urban – Introduced Shrub (u 847)

4.2.2.1 A bed of introduced shrub containing Portuguese laurel (*Prunus lusitanica*), red escallonia (*Escallonia rubra*) and wintercreeper (*Euonymus fortunei*) bordered the entrance to the hospital.

4.2.2.2 Introduced shrub is automatically allocated a condition score of **N/A** in the metric.

4.2.3 4) Urban – Introduced Shrub (u1 847)

4.2.3.1 The easternmost portion of the site had undergone recent clearance at the time of site visit and this section of the site was largely bare, with some colonising vegetation present (photograph 2). As this activity has directly impacted the biodiversity value of the on-site habitat, in accordance with Paragraph 6 (Part 1, Section 14) of the Environment Act, 2021, the baseline value of the site prior to disturbance has been used (see Section 3.5).

4.2.3.2 The habitat has been classified as introduced scrub which is allocated a condition score of **N/A** in the metric.

4.2.4 5) Urban – Developed Land; Sealed Surface (u1b5)

4.2.4.1 Part of the hospital building is included within the red line boundary.

4.2.4.2 Buildings are classified as 'developed land; sealed surface' which is automatically allocated a condition score of **N/A** in the metric.

4.2.5 6 - 8) Urban – Developed Land; Sealed Surface (u1b 532 847)

4.2.5.1 Areas of hardstanding form the car park and paths (photograph 3).

4.2.5.2 Developed Land; Sealed Surface is automatically allocated a condition score of **N/A** in the metric.

4.2.6 9) Individual Trees – Urban Tree

4.2.6.1 A single urban tree is present within the red line boundary. The tree is a medium lime (*Tilia* sp.), with evidence of previous pruning and crown lifting (photograph 4).

4.2.6.2 The tree has been assessed as **moderate** condition.

4.2.7 10) Urban – Artificial Unvegetated; Unsealed Surface (u1c 81 532 518)

4.2.7.1 To the south of the site was an area of gravel surfacing and bare ground, with a poly tunnel, shed and raised beds which were all below minimum mapping unit (photograph 5).

4.2.7.2 Artificial Unvegetated; Unsealed Surface is automatically allocated a condition score of **N/A** in the metric.

4.3 Linear Hedgerow Habitats

4.3.1.1 A hedgerow was present along the north-western boundary of the site, however, this was below minimum mapping unit.

5 Retained Habitats

5.1 Area Habitats

5.1.1.1 The northernmost grassland parcel, bed of introduced shrub and section of hospital building will be retained post-development.

5.1.1.2 Table 3 shows a summary of the area habitats and their corresponding area (ha) and unit score to be retained on site.

Table 3 – Retained Area Habitats

Habitat Parcel Reference	Total Area (ha)	Total Units	Area Retained (ha)	Units Retained
3) Introduced shrub	0.0025	0.01	0.0025	0.01
5) Developed land; sealed surface	0.0102	0.00	0.0102	0.00
Total	**0.0127**	**0.01**	**0.0127**	**0.01**