

BIODIVERSITY NET GAIN DESIGN STAGE ASSESSMENT

FEBRUARY 2025

Marled Hey
Stockbridge Village
Knowsley
Liverpool
L28 0QL

**U R B A N
G R E E N**



QUALITY MANAGEMENT

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Executive Summary

- 1.1.1.1 ForHousing Ltd is proposing to develop land at Marled Hey in Stockbridge (hereafter referred to as 'the site'). The proposals include the demolition of an existing small, 7-unit garage and redevelopment of the land through construction of two bungalows.
- 1.1.1.2 Urban Green has been appointed 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 proposed development produces a net gain of 0.02 area habitat units (98.17%). No watercourses or linear hedgerow features were present on site.
- 1.1.1.5 The trading rules have been met for all habitat types present.
- 1.1.1.6 The development complies with local and national planning policy and off-site mitigation will not be necessary.
- 1.1.1.7 The habitats proposed as part of the post-development design are not considered to be significant on-site enhancements, therefore a Habitat Management and Monitoring Plan (usually 30 years) is not required.

1 Introduction

1.1 Scope

- 1.1.1.1 Urban Green has been instructed by ForHousing Devo Ltd to carry out a Biodiversity Net Gain Assessment at land at Marled Hey, Knowsley (hereafter referred to as ‘the site’) and produce the findings in a report.
- 1.1.1.2 The proposals include the demolition of an existing small, 7-unit garage and redevelopment of the land through construction of two bungalows.

1.2 Site Context

- 1.2.1.1 The site is located at National Grid Reference SJ 42215 93519 and comprises a total area of approximately 0.1ha (see Figure 1).
- 1.2.1.2 The site is located in a densely populated urban area of Stockbridge Village, Knowsley. The site is encompassed by residential buildings with contiguous urban parks. Habitats in the local environment are limited to areas of woodland such as Little Wood, Finch Wood, River Alt and leisure fields, all of which located within 1km of the site. The M57 lies approximately 1km east, separating the site from Knowsley Park which is located approximately 1.2km east of the site.

1.3 Purpose of Report

- 1.3.1.1 The report has been produced to document the methods, results and conclusions of a Biodiversity Net Gain Design Stage 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).



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Legend: Red Line Boundary	0.4 Kilometers	N
Client: ForHousing Devo Ltd	Issue: 01	Figure: 01
Project: Marled Hay	Scale @ A4 1:5,000	
Title: Site Context	Approved by: CL	Checked by: SB
Drawing Ref: UG_2752_SITE_CONTEXT	Author: CL	Date: 04/10/2024
URBANGREEN A: Ground Floor, The Tower, Deva City Office Park, Trinity Way, Manchester M3 7BF T: +44 (0) 161 312 3131 weareurbangreen.co.uk		

1.4 Legislation and Policy

- 1.4.1.1 In England, a minimum of 10% BNG is mandatory under Schedule 7A of the Town and Country Planning Act 1990 (Appendix 1).

Knowsley Local Plan: Core Strategy

Section 5.79: Policy CS8

- 1.4.1.2 Approach to Green Infrastructure and New Development-
- 1.4.1.3 New development must be served by Green Infrastructure to meet the needs of residents and the local environment, in a manner which will:
- a) Contribute to the creation of a high quality residential environment;
 - b) Provide access to high quality open space for leisure and recreational purposes;
 - c) Seek to protect, maintain and where possible enhance biodiversity within and around new developments according to their designation and significance to provide space for nature; and
 - d) Provide adequate mitigation and/or, as a last resort, compensation for Green Infrastructure or biodiversity loss, in circumstances where harm resulting from the development is otherwise unavoidable.

Section 5.87: Natural Assets and Biodiversity-

- 1.4.1.4 The key priorities for natural assets and geology in the Liverpool City Region are:
- To manage the natural assets better – to protect the integrity of nature sites of international importance, and to protect the city region’s nature and geodiversity assets; and
 - To make sure there is no net loss of these natural assets and to extend and enhance the city region’s Ecological Network and natural assets.

Section 5.91:

- 1.4.1.5 In some circumstances, adequate mitigation and/or compensation for biodiversity loss may be acceptable but incapable of being provided within the application site. In such cases where appropriate, priority will be given to equivalent off site opportunities for such mitigation or, as a last resort, compensation. Such opportunities shall be prioritised in the following order:
- Firstly sites in the immediate locality of and/or within any Core Biodiversity Area (to be defined as part of the Liverpool City Region Ecological Network) near to the application site;
 - Secondly, sites in a Nature Improvement Area identified within the borough (to be defined as part of the Liverpool City Region Ecological Network); and lastly
 - Sites in a Nature Improvement Area identified outside the borough (to be defined as part of the Liverpool City Region Ecological Network).

Section 5.92:

- 1.4.1.6 Existing programmes and strategies such as the Liverpool City Region Ecological Framework will help maintain and improve the function of Green Infrastructure in Knowsley, including important sites for biodiversity inside and outside the borough. A balanced approach is required to manage recreational impacts relating to sensitive sites and encourage use of the wider Green Infrastructure network where it is less sensitive to recreational pressure. This is because the provision or use of Green Infrastructure which links to internationally important sites and supporting habitat sites outside of Knowsley (such as Natura 2000 sites), could result in disturbance to designated features within these sites if not appropriately managed.

Section 5.93:

- 1.4.1.7 Management plans which support the protection of internationally important sites for biodiversity within the wider Liverpool City Region are those which pertain to Mersey Estuary Special Protection Area (SPA)/Ramsar, Ribble & Alt Estuaries SPA/Ramsar, Liverpool Bay SPA, Mersey Narrows and North Wirral Foreshore SPA/Ramsar, Sefton Coast Special Area of Conservation (SAC), Dee Estuary SPA/SAC/Ramsar and Martin Mere SPA/Ramsar. Strategies and development proposals in Knowsley must mitigate any potential impacts such as: disturbance to qualifying bird species (from recreational pressure and other sources); deterioration in water quality; deterioration in air quality; and loss of supporting habitat

Knowsley Replacement Unitary Development Plan

Objective 14:

- 1.4.1.8 To protect and manage Knowsley's sites and species of nature conservation importance (including those identified as requiring protection in the North Merseyside Biodiversity Action Plan) and encourage a net gain in the biodiversity resource.
- 1.4.1.9 The North Merseyside Biodiversity Action Plan sets priorities for the protection of habitats, sites and species of nature conservation importance. The UDP therefore identifies Sites of Biological Interest, and policies which will protect these sites, along with other important habitats and species, from unacceptable harm from development.

2 Methods

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

2.2 Site Mapping

2.2.1 Existing Habitats

- 2.2.1.1 The site was subject to a field survey on the 30th October, by Olivia Jones, Assistant Ecologist. The weather conditions were 12°C, overcast (8/8 oktas), wind speed 2 Beaufort scale.
- 2.2.1.2 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.
- 2.2.1.3 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. Habitats were identified using primary codes and additional secondary codes have been used to record further information regarding various aspects of the site.
- 2.2.1.4 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. The baseline habitat map is displayed in Appendix 2. A summary of primary and secondary codes can be found in Appendix 3.

2.2.2 Post-Development Habitats

- 2.2.2.1 The proposed layout was provided by ForHousing Devo Ltd (see Appendix 4) in PDF format. This was used to categorise the proposed habitats, and the document was imported into ArcGIS to gather the post-development areas.

2.3 The Statutory Biodiversity Metric

- 2.3.1.1 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.
- 2.3.1.2 The calculation was performed by a technically competent and experienced person as detailed in British Standard BS8683 - Suitably qualified person – definition in BS8683:2020.
- 2.3.1.3 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.

- 2.3.1.4 Although the site qualifies for assessment using the Small Sites Metric, priority woodland is present within 100m of the site boundary, therefore the use of the Statutory Metric was deemed more appropriate.

2.4 Habitat Scoring

- 2.4.1.1 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.

2.4.2 Minimum Mapping Units (MMU)

- 2.4.2.1 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.

2.4.3 Baseline Units

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

2.4.3.2 Condition

- 2.4.3.3 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.

- 2.4.3.4 Condition assessment results for each habitat have been provided within the ‘user comments’ column of the associated Statutory Biodiversity Metric (Urban Green, 2024a).

2.4.3.5 Vegetative Survey Methodology

- 2.4.3.6 Species abundance was described using the DAFOR scale as shown in Table 1. Percentages are an approximate indication rather than a quantitative measure.

Table 1 – Key to Species Abundance

Code	Term	Description	Indicative Percentage Ranges
D	Dominant	Covers most of the area	>50%
A	Abundant	Very common throughout the area.	33 – 50%
F	Frequent	Common or with many individuals.	25 – 33%
O	Occasional	Occurs in several places but not throughout. Populations are not large.	10 – 25%
R	Rare	Occurs in low numbers in relation to size of area.	0.1 - 10%
“L” will be used to indicate abundance in a localised area, e.g. LA = Locally abundant			

2.4.3.7 For grassland habitats, at least five 1m² quadrat samples are taken for each grassland parcel and the number of species present within each quadrat is recorded to inform grassland classification and condition. Quadrat locations are selected using stratified random sampling.

2.4.3.8 Distinctiveness

2.4.3.9 The distinctiveness of each habitat is automatically assigned by the tool, based upon national records of the occurrence and rarity of each habitat. Table 2 provides the basis of the distinctiveness assessment for area habitats.

Table 2 – 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
Very Low (area and watercourse)	0	Little or no biodiversity value e.g. hard standing or sealed surface.

2.4.3.10 Strategic Significance

2.4.3.11 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 as Nature Recovery Areas, local biodiversity plans, National Character Area 14 objectives and green infrastructure strategies (see Table 3).

Table 3 – 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
Medium strategic significance Where LNRS is not available, good potential but not in area defined in local policy – using professional judgment	1.1

Strategic Significance Categories	
Category	Score
Low Strategic Significance Definitions for high or medium not met, i.e., does not deliver specific priorities outlined in LNRS/local plans	1

- 2.4.3.12 The site is adjacent to woodland which is identified within the Liverpool City Region (LCR) Ecological Network as a Core Biodiversity Area (CBA) for woodland. This is located approximately 40m northwest of the site.
- 2.4.3.13 A desk-based study using MAGIC was also performed to identify any statutory or non-statutory sites in the area using a 1km radius. The results are summarised in Table 4.

Table 4 – Statutory and Non-Statutory Sites within 1km of the Site

Designated Site	Approx. Distance from Site	Details
Statutory Designated Sites		
Croxteth Hall Country Park Local Nature Reserve (LNR)	945m north	The LNR was created from the former Mull Wood plus other woodland areas such as Cocked Hat Wood, Dam Wood, The Wilderness and Ice House Woods together with some agricultural land in the park. The reserve has woodland, rough grassland and pasture, several ponds and is bounded by the River Alt. A variety of birds breed in the woodland and the ponds are good for plants such as water dropwort and dragonflies.
Non-Statutory Designated Sites		
Little Wood SBI	670m north	Predominantly broadleaf woodland with much species diversity and an interesting invertebrate fauna.
River Alt, Seth Powell Way, Huyton SBI	420m northwest	Croxteth Country Park is Liverpool's largest terrestrial Local Wildlife Site, encompassing a diverse habitat mosaic, including plantation woodlands, grasslands, ponds, and the River Alt, both within and beyond the park. It hosts a rich variety of plants, with some of the city's most structurally diverse woodlands dominated by Beech, Oak, and Pine, and supports extensive ground flora along woodland edges and clearings. The park's ponds provide habitats for notable wetland plants and rare dragonflies, while the River Alt supports Water Voles and a range of riparian plants. Nearby Coachman's Wood and Mab Lane Field add to the ecological richness, with Mab Lane featuring floristically rich grassland. The area also supports Liverpool's largest assemblages of woodland and habitat-mosaic breeding birds, including rare species like Willow Tit and Garden Warbler.
The Roughts SBI	1km north	A mature broadleaf woodland with associated ponds and stream, possibly part of a garden in the past.

- 2.4.3.14 An area of priority deciduous woodland lies approximately 178m northeast of the site, listed by the National Forest Inventory 2020. Lowland Mixed Broadleaf Woodland is also identified as a priority habitat within the North Merseyside Biodiversity Action Plan (BAP).
- 2.4.3.15 The site is allocated for housing development, according to the Knowsley Council Local Plan Policies Map.
- 2.4.3.16 None of the pre- or post-development habitats on site are identified as priority, form part of a designated site or provide connectivity within the wider landscape, therefore all habitats have been allocated low strategic significance.

2.4.4 Liverpool City Region Ecological Network

- 2.4.4.1 A Local Nature Recovery Strategy (LNRS) for the Liverpool City Region is currently under production. The existing Liverpool City Region Ecological Network has therefore been used to inform this assessment
- 2.4.4.2 Upon consultation with the Liverpool City Region Ecological Network Explorer, three areas of priority woodland are located within 100m of the east, south and west of the site. The River Alt and M57 Corridor also lie to the south of the site, which is a priority habitat and Nature Improvement Area.
- 2.4.4.3 There are no priority habitats within the site boundary.

2.4.5 Post-Development

- 2.4.5.1 Post-development habitats are subject to the same condition assessments as baseline habitats, based on information provided by the proposed layout (Appendix 4).
- 2.4.5.2 Two additional factors are considered within post-development landscapes which are detailed below.
- 2.4.5.3 Temporal Multiplier
- 2.4.5.4 For post development habitat creation or enhancement, a risk multiplier will be automatically applied by the tool to account for the period of diminished ecological value while the habitat reaches the targeted post development condition. This time and therefore risk multiplier differs between habitat types, if the habitat is being created or enhanced and how the habitat is to be managed. The predetermined multiplier is based on the average time to meet targeted condition assuming good practice principles and appropriate management strategies are applied.
- 2.4.5.5 Difficulty Multipliers
- 2.4.5.6 A risk multiplier will be automatically applied by the tool to account the ‘difficulty’ of habitat-specific enhancement or creation. There are two separate difficulty multipliers assigned to each habitat, one for creation and one for enhancement/restoration, recognising that the technical challenges will not necessarily be the same for both.

2.5 Lifespan of Report

- 2.5.1.1 In accordance with CIEEM's Advice Note on the Lifespan of Ecological Reports and Surveys (CIEEM, 2019), the details of this report will remain valid for a period of **18 months** from the date of the survey (i.e. until **30th April 2026**. After this date, this assessment should be reviewed to determine whether any updated surveys are required.

2.6 Constraints to the Survey

- 2.6.1.1 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.
- 2.6.1.2 October is a suboptimal month for carrying out UKHab Habitat Surveys due to being outside of the optimal plant growing season. Therefore, it is likely that some plants are present on the site but were not evident at the time of the survey and were not recorded. This is not considered to be a significant constraint with regards to the general UKHab survey results as, due to the size and location of the site and limited extent of the habitats, it is considered very unlikely that any rare or priority plant species were missed.
- 2.6.1.3 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.
- 2.6.1.4 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 Pre-Development Habitat Assessment

- 3.1.1.1 Baseline habitats were assessed following the methodology outlined in Section 2 and the assessment is supported by data from the Preliminary Ecological Appraisal (Urban Green, 2024b).
- 3.1.1.2 Habitat descriptions are provided below, and the results of the condition assessment are provided in the accompanying Statutory Biodiversity Metric.
- 3.1.1.3 Habitats with comparable structure and condition assessment results have been grouped for simplicity. The habitats have been given reference numbers for clarity regarding in-text and the metric calculation illustrates the numerical data.
- 3.1.1.4 Photographs of the habitats present onsite are included in Appendix 5.

3.2 Area Habitats

3.2.1 1) Urban – Developed Land, Sealed Surface (Building) (u1b5 519)

- 3.2.1.1 The centre of the site contains a small disused seven-unit garage (Photograph 1, Appendix 5)
- 3.2.1.2 Buildings are classified as ‘developed land; sealed surface’ which is automatically allocated a condition score of **N/A** in the metric.

3.2.2 2) Urban – Developed Land, Sealed Surface (Hardstanding) (u1b6)

- 3.2.2.1 Concrete covers the entire northern and southern section of the site, comprising road and pavement. The eastern end of the developed land is bordered by metal fencing (Photographs 2, 3, 5 and 6, Appendix 5)
- 3.2.2.2 Hardstanding is classified as ‘developed land; sealed surface’ which is automatically allocated a condition score of **N/A** in the metric.

3.2.3 3) Grassland – Modified Grassland (g4 106 516)

- 3.2.3.1 East of the building is a small strip of modified grassland, which appeared to have been recently mown at the time of the survey (Photograph 4, Appendix 5).
- 3.2.3.2 Species within the grassland comprised black nightshade (*Solanum nigrum*), greater plantain (*Plantago major*), lesser swine-cress (*Lepidium didymium*), common ragwort (*Jacobaea vulgaris*), cuckooflower (*Cardamine pratensis*), creeping buttercup (*Ranunculus repens*), common field-speedwell (*Veronica persica*), hoary plantain (*Plantago media*), white clover (*Trifolium repens*), dandelions (*Taraxacum spp.*), spear thistle (*Cirsium vulgare*), hairy bitter-cress (*Cardamine hirsute*), groundsel (*Senecio vulgaris*), cock’s-foot (*Dactylis glomerata*), common mouse-ear (*Cerastium fontanum*), thale cress (*Arabidopsis thaliana*), yarrow (*Achillea millefolium*), creeping bent (*Agrostis stolonifera*) and daisy (*Bellis perennis*).
- 3.2.3.3 The grassland has been allocated a condition score of **poor** in the metric.

4 Lost Habitats

4.1 Area Habitats

- 4.1.1.1 All current developed land and buildings are proposed to be removed and redeveloped into two new buildings. It is proposed that all existing habitats will be lost to the development.
- 4.1.1.2 Table 5 shows a summary of the area habitats and their corresponding area (ha) and unit score to be lost on site.

Table 5 – Area habitats to be lost on site

Habitat Parcel Reference	Total Area (ha)	Total Units	Area Lost (ha)	Units Lost	Proposed Mitigation
1) Developed land; sealed surface	0.04	0.00	0.04	0.00	This habitat provides negligible ecological value and does not require compensation
2) Developed land; sealed surface	0.051	0.00	0.05	0.00	
3) Modified Grassland	0.013	0.03	0.01	0.03	The creation of vegetated gardens will compensate for the loss of this habitat
Total	0.10	0.03	0.10	0.03	

5 Pre-Development Habitat Summary

- 5.1.1.1 Using the Statutory Biodiversity Metric, the habitat units of the existing site habitats were calculated as well as the habitat units to be retained, lost and enhanced in site development.
- 5.1.1.2 The results of these calculations are presented in Table 6.

Table 6 - Pre-Development Unit Summary

	On-site baseline	Retained	Lost	Enhanced
Area Habitat Units	0.03	0.00	0.03	0.00

6 Post-Development Habitat Assessment

- 6.1.1.1 Proposed habitats were assessed following the methodology outlined in Section 3.
- 6.1.1.2 Habitat descriptions are provided below, and the results of the condition assessment are provided in the accompanying Statutory Biodiversity Metric.
- 6.1.1.3 Habitats with comparable structure and condition assessment results have been grouped for simplicity. The habitats have been given reference numbers for clarity regarding in-text and the metric calculation illustrates the numerical data.

6.2 Area Habitats

6.2.1 1) Urban - Vegetated Garden

- 6.2.1.1 Areas of vegetated garden are proposed to be developed. This will include the creation of grass to front and rear gardens.
- 6.2.1.2 Vegetated gardens are automatically allocated a condition score of **N/A** within the metric.

6.2.2 2 & 3) Urban - Developed Land; Sealed Surface

- 6.2.2.1 Areas of hardstanding will be created upon the existing hardstanding areas, functioning as driveway and pavement. Two new bungalow buildings will also be developed upon the existing hardstanding.
- 6.2.2.2 Buildings and hardstanding are classified as 'developed land; sealed surface' which is automatically allocated a condition score of **N/A** within the metric.

7 Post-Development Habitat Summary

7.1.1.1 Using the Statutory Biodiversity Metric, the habitat units of the proposed and created habitats were calculated; the habitat units to be retained within site development were calculated; and the habitat units that are anticipated to be lost in site development were calculated.

7.1.1.2 The results of these calculations are presented in the Table 7.

Table 7 – Post Development Biodiversity Net Gain Calculation

	Habitat Unit Change					Net change in Biodiversity		
	On-site baseline	Retained	Lost	Enhanced	Created	On-site post development	Habitat units	%
Area Habitat Units	0.03	0.00	0.03	0.00	0.05	0.05	0.02	98.17%

7.1.1.3 As illustrated in Table 7, the current landscape proposals for the development of the site produce a 0.02 unit (98.17%) net gain in biodiversity for area habitats. No watercourses or linear hedgerow habitats were present on site.

7.1.1.4 The trading rules were satisfied by the landscape proposals.

7.1.1.5 Consequently, the development does meet all local and national planning policy and off-site mitigation will not be necessary.

8 References

- Baker, J., Hoskin, R. and Butterworth, T. (2019). Biodiversity net gain. Good practice principles for development: A practical guide.
- Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2023). *UK Habitat Classification – Habitat Definitions V2.0*.
- CIEEM (2019). Advice Note on the Lifespan of Ecological Reports and Surveys. CIEEM.
- Communities and Local Government Committee (2021). The *National Planning Policy Framework*.
- Department for Environment, Food & Rural Affairs (2024a). Statutory Biodiversity Metric: User Guide.
- Department for Environment, Food & Rural Affairs (2024b). Statutory Biodiversity Metric Condition Assessments.
- eCountability Ltd. (2018). UK Habitat Classification (Professional Edition).
- Knowsley Local Plan: Core Strategy (January 2016). Available at:
<https://localplanmaps.knowsley.gov.uk/documents/knowsley-local-plan-adopted-core-strategy.pdf#page=64>
- Knowsley Replacement Unitary Development Plan (June 2006). Available at:
https://localplanmaps.knowsley.gov.uk/documents/Knowsley_UDP_2006.pdf#page=23
- JNCC (2010). Handbook for Phase One Habitat Survey – 2010 Edition. England Field Unit, Nature Conservancy Council. Reprinted JNCC.
- Liverpool City Region (N.D). LCR Ecological Network Explorer. Available at: <https://lcreconet.uk/map/>
- Stace, C. (2010). New Flora of the British Isles. 3rd ed. Cambridge: Cambridge University Press.
- Urban Green (2024a). Statutory Biodiversity Metric. Ref: UG_2752_BNG_CALC_01.
- Urban Green (2024b). Preliminary Ecological Appraisal (PEA). Ref: UG_2752_ECO_PEA_01.

Biodiversity Net Gain (BNG) is a way of creating and improving natural habitats. BNG makes sure development has a measurably positive impact ('net gain') for biodiversity, compared to what is present onsite prior to development.

BNG is now a mandatory condition for any new development of land in England (specific exemptions apply), as of 12th February 2024. In order for planning permission to be granted, the development must be able to achieve at least a **10% net gain in biodiversity** for each type of habitat unit present (i.e., area habitats, linear hedgerow habitats and watercourse habitats) and meet the trading rules.

Where a 10% net gain cannot be achieved onsite, offsite mitigation will be necessary and must be carried out under a conservation covenant or planning obligation.

In England, BNG is mandatory under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021).

Schedule 14 the Environment Act (2021) states:

Overview

1 (1) This Schedule makes provision for grants of planning permission in England to be subject to a condition to secure that the biodiversity gain objective is met.

(2) Paragraphs 2 to 12 have effect for the purposes of this Schedule.

Biodiversity gain objective

2 (1) The biodiversity gain objective is met in relation to development for which planning permission is granted if the biodiversity value attributable to the development exceeds the pre-development biodiversity value of the onsite habitat by at least the relevant percentage.

(2) The biodiversity value attributable to the development is the total of—

- (a) the post-development biodiversity value of the onsite habitat,
- (b) the biodiversity value, in relation to the development, of any registered offsite biodiversity gain allocated to the development, and
- (c) the biodiversity value of any biodiversity credits purchased for the development.

(3) The relevant percentage is 10%.

(4) The Secretary of State may by regulations amend this paragraph so as to change the relevant percentage.

The National Planning Policy Framework (NPPF, 2023) supports the requirements of the Environment Act:

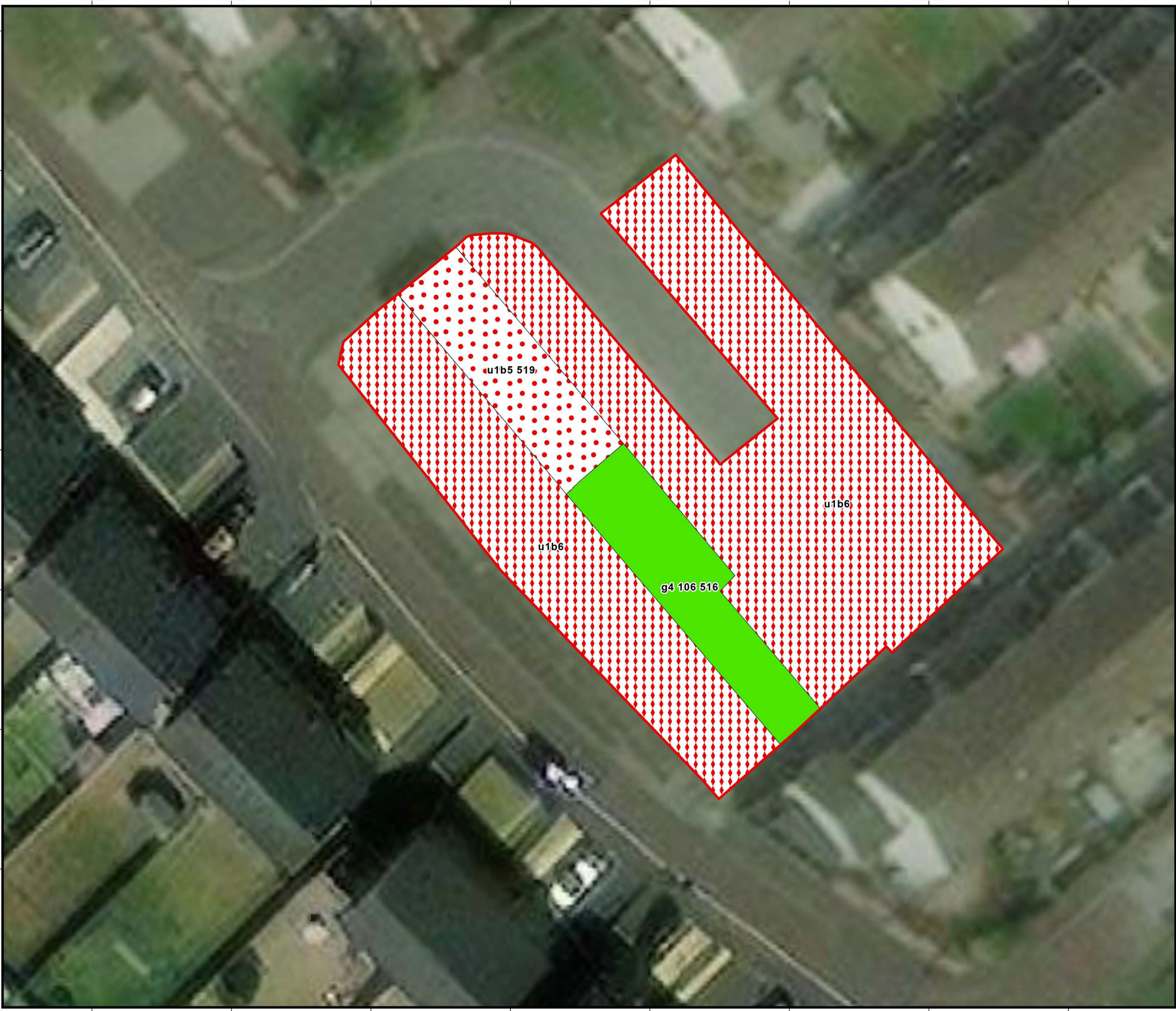
Paragraph 180 of the NPPF states:

Planning policies and decisions should contribute to and enhance the natural and local environment by:

d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

APPENDIX 2 - BASELINE HABITAT MAP

U R B A N
G R E E N



U R B A N
G R E E N

Legend

- Red Line Boundary
- Buildings
- Modified grassland
- Other developed land



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Client:		ForHousing Devo Ltd	
Project:		Marled Hey	
Title:		UKHAB Habitat Map	
Issue:		01	Figure: 00
Drawn:	CL	Checked:	OJ
Approved:		OJ	
Project:	UG2752	Scale @ A3:	Date: 30/10/2024
Dwg No:		Revision:	
UG_2752_ECO_HM_01		01	

APPENDIX 3 – PRIMARY AND SECONDARY CODES

U R B A N
G R E E N

Primary Code	Definition
u1b5	Buildings
u1b6	Other Developed Land
g4	Modified Grassland
Secondary code	Definition
106	Mown
516	Active Management
519	Abandoned

APPENDIX 4 - PROPOSED LANDSCAPE PLAN

U R B A N
G R E E N



U R B A N
G R E E N

Legend

- Red Line Boundary
- Building
- Developed land sealed surface
- Modified grassland
- Tree

N



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Client:		ForHousing Devo Ltd	
Project:		Marled Hey	
Title:		Post Development UKHAB Habitat Map	
Issue:		Figure:	
01		00	
Drawn:	Checked:	Approved:	
CL	OJ	OJ	
Project:	Scale @ A3:	Date:	
UG2752	1:250	30/10/2024	
Dwg No:		Revision:	
UG_2752_ECO_PDHM_01		01	

APPENDIX 5 - SITE PHOTOGRAPHS

U R B A N
G R E E N



Photograph 1: Abandoned seven-unit garage building



Photograph 2: Area of hardstanding to the front of the garage building



Photograph 3: Area of raised pavement north of the site



Photograph 4: View of the modified grassland on-site



Photograph 5: Line of modified grassland next to more hardstanding



Photograph 6: View of the surrounding metal fence



U R B A N
G R E E N