



Biodiversity Net Gain Assessment

Atlas Business Park, Simonsway,
Wythenshawe, Manchester M22 5PR

Presented to: **Ridge and Partners LLP c/o AVIVA
Investors**

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About us

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As part of Lucion Services, our combined team of 500 in the UK has a range of specialist skill sets in over 50 environmental consultancy specialisms including asbestos, hazardous materials, ecology, air and water services, geo-environmental and sustainability amongst others.

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1.0 Introduction

1.1 Context and Purpose

Delta-Simons Limited ("Delta-Simons") was instructed by Ridge and Partners LLP c/o AVIVA Investors ("the Applicant") to undertake a Biodiversity Net Gain (BNG) Assessment to determine whether the construction of three B8 type units with associated hard and soft landscaping ("the Proposed Development") at Atlas Business Park, Simonsway, Wythenshawe, Manchester M22 5PR (hereafter referred to as "the Site") can achieve a net gain in biodiversity. Figure 1 shows the Site Location.

The revised National Planning Policy Framework (NPPF, 2021) states, "Planning policies and decisions should contribute to and enhance the 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...", it also places greater emphasis on achieving a measurable net gain in biodiversity.

This assessment was carried out in adherence to the five rules contained within the Biodiversity Metric 4.0 User Guide (Natural England, 2023):

- Rule 1: Competency requirements must be complied with.
- Rule 2: Biodiversity unit outputs are unique to this metric. The results of other metrics, including previous versions of this metric, are not comparable to those of this metric. The three types of biodiversity units generated by this metric (area, hedgerow and watercourse) cannot be summed, traded, or converted between modules.
- Rule 3: The trading rules of this metric must be followed.
- Rule 4: Losses and deterioration of irreplaceable or very high distinctiveness habitat cannot be accounted for through this metric.
- Rule 5: In exceptional ecological circumstances, deviation from this metric methodology may be permitted by the relevant consenting body or planning authority.

In addition, use of the metric during this assessment was informed by the eight principles as contained within the Biodiversity Metric 4.0 User Guide (Natural England, 2023):

- Principle 1: This metric does not change existing biodiversity protections, statutory obligations, or policy requirements. The use of this metric does not override the ecological mitigation hierarchy and other requirements (such as consenting or licensing processes, for example woodlands).
- Principle 2: This metric should be used in accordance with established good practice guidance and professional codes.
- Principle 3: This metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice.
- Principle 4: Biodiversity units are a proxy for biodiversity and should be treated as relative values.
- Principle 5: This metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance.
- Principle 6: Habitat interventions need to be realistic and deliverable within a relevant project timeframe.
- Principle 7: Created and enhanced habitats should seek, where practical and reasonable, to be local to any impact and deliver strategically important outcomes for nature conservation.
- Principle 8: The metric does not enforce a minimum habitat size ratio for compensation of losses. However, proposals should aim to maintain habitat extent (supporting more, bigger, better and more

joined up ecological networks) and ensure that proposed or retained habitat parcels are of sufficient size for ecological function.

1.2 Proposed Development

It is understood that the Proposed Development will comprise of B8 type units at the Site, based on plans provided by Bea Landscape Design Limited (Drawing 1 - 22-103-P-03A@A0 Soft Landscape Proposals).

The construction phase will comprise:

- Clearance of the majority of the on-Site habitats, including grassland, scrub, and scattered trees; and
- It is understood that sections of the boundary trees are planned for retention.

The operational phase will comprise:

- Use of buildings for B8 purposes; and
- Management of retained trees and proposed habitats in accordance with a Landscape and Ecological Management Plan (LEMP).

2.0 Methodology

2.1 Overview

The approach used to assess biodiversity impacts resulting from the proposed development is detailed below. This assessment has been based on the Defra Metric 4.0 (the Metric), the Landscape Proposal Plan provided by the landscape architect in an email in June 2023 and the Preliminary Ecological Appraisal (PEA) undertaken in January 2021, with updated condition assessments in September 2022.

2.2 Biodiversity Metric

The quantitative assessment is based on the Metric to provide a transparent and repeatable measure of biodiversity at each of the stages identified above. The biodiversity score considers a number of factors including:

- Habitat distinctiveness;
- Habitat condition;
- Temporal risk: time required to reach target condition;
- Difficulty to create/restore;
- Connectivity; and
- Spatial area of loss/gain of each habitat.

The pre-development value is compared to the proposed habitat composition post development to assess the change in biodiversity value using biodiversity units as a proxy numeric value.

The Metric only considers habitats and does not take protected and notable species or associated enhancement measures such as bird/bat boxes into account.

2.3 Habitat Distinctiveness

Distinctiveness refers to the relative scarcity of the habitat and its importance for nature conservation. Habitats are assigned to distinctiveness bands. These are based on an assessment of the distinguishing features of a habitat or linear feature, including the 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.

The distinctiveness band of each habitat is preassigned in the Metric. The bands are based upon the UK habitat classification system. Where no directly comparable Defra habitat type was available to match the vegetation recorded by Phase 1 Habitat survey, the closest approximation was selected.

The Defra habitat typologies are split into five distinctiveness bands:

- **Very High** - Priority habitats as defined in Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 that are highly threatened, internationally scarce, and require conservation action;
- **High** - Priority habitats as defined in Section 41 of the NERC Act requiring conservation action;
- **Medium** - Semi-natural habitats not classed as Priority Habitat;
- **Low** - Habitat of low biodiversity value; and
- **Very low** - Little or no biodiversity value.

Under the supplementary habitat calculations for linear habitats, hedgerows are assigned a distinctiveness weighting based on their physical structure and the species composition of the woody element of the

hedgerow, and their association with physical features (ditches and banks) that may enhance their ecological value by providing additional niches or enhanced capacity to provide habitat connectivity.

2.4 Habitat Condition

The condition of a habitat is defined by its particular quality. For example, a habitat is in poor condition if it fails to support the notable/protected species for which it is valued, or if it is in unfavourable condition due to degradation from external factors, such as pollution, erosion or invasive species. Condition assessment criteria is based on Common Standards Monitoring of protected sites in the UK where key attributes and positive and negative indicators are used. Habitat condition categories are as follows:

- Good;
- Fairly good;
- Moderate;
- Fairly poor;
- Poor;
- N/A – Agricultural; and
- N/A – other.

For linear features, condition assessment is based on the dimensions and other physical characteristics of a hedgerow or line of trees against a set of minimum requirements for the feature to be considered in a 'favourable' condition. The condition assessment is based on the Hedgerow Survey Handbook.

2.5 Baseline Assessment

The baseline biodiversity score for the Site has been determined using the PEA of the Site undertaken by Delta Simons in January 2022. The baseline habitats are shown in Figure 2.

The baseline assessment for the Site has now been established and will not change throughout the development period. This is the baseline from which future audits can be compared.

2.6 Post Development Biodiversity Unit Calculation

Biodiversity Units and Linear Units resulting from ecological mitigation for the Scheme to compensate for potential losses are referred to as post-development Biodiversity Units/Linear Units (BUs/LUs).

To calculate the BUs which may be achieved post-development, risk factors are introduced. The aim of a risk factor is to correct for a disparity or risk, associated with the uncertainty surrounding the creation of habitats. There are three main types of risk that are accounted for within the Metric. These are categorised as follows:

- **Spatial Risk** – these reflect ecological risks deriving from the change in location of the habitat or resource. By way of example, it may be that recreating a habitat in a new location distant from the area of loss could reduce its biodiversity value, through reduced connectivity and a decrease in habitat availability for the species affected by the development;
- **Temporal Risk** – the risk associated with the time required for created habitats to reach their target suitability and for the functionality of the habitat to be restored; and
- **Delivery Risk** – the risks associated with the actual delivery of the offset due to, for instance, uncertainty in the effectiveness of habitat creation/management.

Each risk multiplier is assigned a numerical score which enables post development Biodiversity Units to be calculated.

2.7 Proposed Scheme

In order to calculate the post-intervention score, the Landscape Proposal Plan (Drawing 1) have been used as well as assumptions for UK Habitat classification and targeted habitat conditions as set out in Section 3.1.

2.8 Future Auditing

This Report sets out the predicted biodiversity impacts of the scheme based on a set of assumptions and professional judgement for target habitat conditions post-development. In order to ensure the development achieves the targets set out below, the scheme should be accompanied by an appropriate Landscape and Ecology Management and Monitoring Plan (LEMMP). The LEMMP should allow for regular monitoring of the habitat establishment and their progression to the desired condition target, allowing for changes to management regimes as necessary to achieve the targets set.

3.0 Assumptions and Application of Professional Judgement

3.1 Baseline Habitats

Professional judgement has been made in relation to the baseline habitats and their conditions assessed in line with the Biodiversity Metric 4.0 – Technical Annex 1: Condition Assessment Sheets and Methodology.

3.2 Future Habitats

Professional judgement and translation tables included within the metric have been applied in order to translate habitats included within the Landscape Proposal Plan (Drawing 1) into UK Habitat Classifications suitable for use within the metric.

Assumptions and professional judgement have been applied in relation to the habitat target condition. These judgements are based on realistic targets according to the location and context of the development. Future management of the landscaping at the Site should be informed by an appropriate management and monitoring plan to achieve these target conditions.

4.0 Results

4.1 Baseline

Baseline habitats are shown in Figure 2 and consists of broadleaved woodland with mixed scrub and neutral grassland across the Site, in addition to scattered mature trees, areas of ruderal/ephemeral vegetation and developed land. Overall, the baseline for the Site is calculated to provide 42.92 area BUs.

Table 1, below, provides a summary of the baseline habitats, areas and biodiversity units for the Site.

Table 1 - On-Site Area Habitat Baseline Score

Existing Habitats (Area)	Condition	Area (ha)	Biodiversity Units
Woodland and forest - Other woodland; broadleaved	Moderate	2.28	18.24
Urban - Developed land; sealed surface	N/A - Other	0.01	0.00
Heathland and shrub - Mixed scrub	Poor	1.43	5.72
Sparsely vegetated land - Ruderal/Ephemeral	Poor	1.48	2.96
Urban - Developed land; sealed surface	N/A - Other	1.06	0.00
Grassland - Other neutral grassland	Poor	3.74	14.96
Urban - Urban Tree	Poor	0.26*	1.04
Total		10.00	42.92

*As trees do not provide a groundcover area, their areas are not included in the total within this table, meaning that the total areas presented remain the same as the area of the Site. Within the calculator, however, they are included in addition to the ground vegetation areas.

4.2 Proposed Scheme

Post-development habitat compositions are shown in Drawing 1 and detailed in Table 2 and 3, below. The majority of the Site post-development will be developed land, a mix of new buildings and hardstanding. Areas of woodland and scrub on the boundaries of the Site will be retained and enhanced through management and infill planting, whilst an area of neutral grassland will be retained and enhanced with overseeding.

Table 2, below, provides a summary of the post-development habitats, areas, and baseline biodiversity units for the Site.

Table 2 - Post-Development Area Habitat Score

Proposed Habitats (Area)	Target Condition	Area (ha) Created	Area (ha) Enhanced	Biodiversity Units Delivered
Urban - Developed land; sealed surface	N/A - Other	7.04	-	0.00
Heathland and shrub - Mixed scrub	Moderate	0.14	-	0.94
Urban - Introduced shrub	Condition Assessment N/A	0.04	-	0.08
Heathland and shrub - Mixed scrub	Good	0.34	0.48	4.61 + 2.28
Grassland - Other neutral grassland	Good	0.51	0.49	4.26 + 3.41
Woodland and forest - Other woodland; broadleaved	Good	0.43	0.53	5.72 + 2.02
Urban - Urban Tree	Good	0.69*	0.16*	1.05 + 2.11
Total		8.50	1.50	26.47

*As trees do not provide a groundcover area, their areas are not included in the total within this table, meaning that the total areas presented remain the same as the area of the Site. Within the calculator, however, they are included in addition to the ground vegetation areas.

Table 3, below, provides a summary of the baseline linear habitats on Site (i.e. hedgerows).

Table 3 - Post-Development Linear Habitat Score

Proposed Habitats (Linear)	Target Condition	Length (km) Created	Linear Units Delivered
Native Hedgerow	Moderate	0.43	1.44
Total		0.43	1.44

All of the hedgerows to be delivered on-Site have been combined to provide the above length measurement. These hedgerows are planned to be a combination of native and non-native species but will be over 50% native species.

5.0 Conclusions and Recommendations

5.1 Conclusions

The above assessment results in a total net unit change of:

Area Units = -16.45 **Total net % change = -38.33%**

Linear Units = +1.44 **Total net % change = N/A**

See the attached completed Defra Metric for detailed results (Appendix A).

Based on the information currently available, this assessment indicates that the development will result in a net loss in biodiversity of 38.33%, and the trading rules are not satisfied for low and medium distinctiveness habitats. The main contributor to this is the loss of woodland, scrub, and grassland across the Site, despite the retention and enhancement of a large proportion of the boundary vegetation. The addition of new scrub planting, additional tree planting alongside those retained and the creation of new areas of hedgerow are positive changes.

It should be noted that any habitat creation is required to be managed in perpetuity to ensure habitats meet the target conditions (which for the purposes of BNG is considered to be 30 years). Monitoring of this should be implemented through an appropriate LEMMP.

5.2 Recommendations

The mitigation hierarchy has been followed in relation to the proposed development, with large proportion of woodland, scrub and grassland being retained and enhanced across the Site. It should be noted that the plans have been amended to include the retention and subsequent enhancement of several mature trees in the eastern extent of the Site. Furthermore, the Site is subject to a bird hazard management plan in relation to Manchester Airport, which has reduced planting opportunities on-Site to deter nesting/foraging birds.

A bespoke compensation agreement could be reached between the Client and LPA in order to ensure that the remaining units are compensated for, or alternatively an off-Site area could be enhanced.

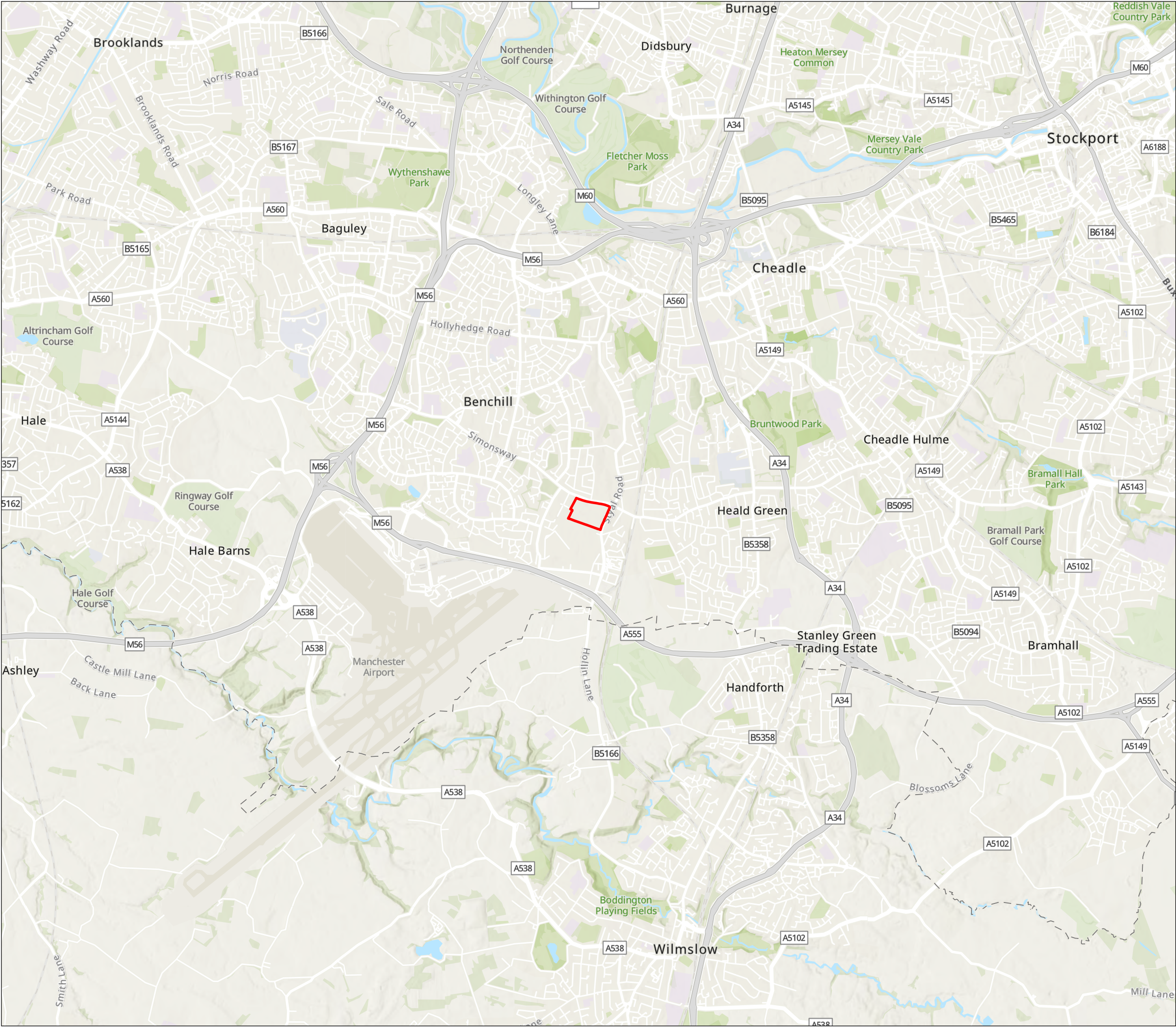
The requirement for further consideration of Biodiversity Net Gain will depend on the current approach and requirements of the LPA.

6.0 Disclaimer

The recommendations contained in this Report represent Delta-Simons' professional opinions, based upon the information referred to in Section 1.0 of this Report, exercising the duty of care required of an experienced Ecology Consultant. Delta-Simons does not warrant or guarantee that the Site is free of Bats or other protected species.

This Report was prepared by Delta-Simons for the sole and exclusive use of the Client and for the specific purpose for which Delta-Simons was instructed as defined in Section 1.0 of this Report. Nothing contained in this Report shall be construed to give any rights or benefits to anyone other than the Client and Delta-Simons, and all duties and responsibilities undertaken are for the sole and exclusive benefit of the Client and not for the benefit of any other party. In particular, Delta-Simons does not intend, without its written consent, for this Report to be disseminated to anyone other than the Client or to be used or relied upon by anyone other than the Client. Use of the Report by any other person is unauthorised and such use is at the sole risk of the user. Anyone using or relying upon this Report, other than the Client, agrees by virtue of its use to indemnify and hold harmless Delta-Simons from and against all claims, losses and damages (of whatsoever nature and howsoever or whensoever arising), arising out of or resulting from the performance of the work by the Consultant.

Figure 1 – Site Location Plan



Legend

Site boundary

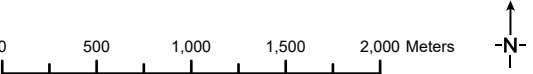


Figure	Site Location Plan				
Job	Atlas Business Park, Simonsway, Wythenshawe, Manchester				
Client	Ridge and Partners LLP c/o AVIVA Investors				
Figure No.	1	Revision	A	Date	14/10/2022
Drawn	KH	Checked	KR	Scale	1:40,000 @ A3
Job No.	20-0739.06			Central GR	383841E 385984N



Figure 2 – Habitat Survey Plan



Legend

- Site boundary
- Broadleaved woodland - semi-natural
- Scrub - dense/continuous
- Poor semi-improved grassland
- Ephemeral / short perennial
- Buildings
- Hardstanding
- Intact hedge - species-poor
- Fence
- Wall
- Earth bank
- Scattered broadleaved tree
- Scattered scrub
- Target note

Figure	Habitat Survey Plan				
Job	Atlas Business Park, Simonsway, Wythenshawe, Manchester				
Client	Ridge and Partners LLP c/o AVIVA Investors				
Figure No.	2	Revision	A	Date	14/10/2022
Drawn	KH	Checked	CD	Scale	1:1,800 @ A3
Job No.	20-0739.06		Central GR 383845E 385981N		

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Drawing 1 - 22-103-P-03@A0 Soft Landscape Proposals

Appendix A - Defra Metric 4.0 Calculation Tool (Issued Separately)