



ASHTON KEYNES AD FACILITY, WILTSHIRE

BIODIVERSITY NET GAIN (BNG) PLAN

BMD.25.0155.RPE.IA.002

DATE: SEPTEMBER 2025



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BIODIVERSITY NET GAIN PLAN Ashton Keynes AD Facility

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BMD.25.0155.RPE.IA.002. Biodiversity Net Gain Plan

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Declaration of compliance with professional code of ethics or conduct

The information which we have prepared and provided is true and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bonafide opinions.

All reasonable efforts have been made to comply with current legislation and best practice, including BS 42020:2013, the Environment Act 2021 (Schedule 7A: Biodiversity Gain), the National Planning Policy Framework (2025), CIEEM EcIA Guidelines (2018, updated 2022), and relevant Natural England guidance.

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EXECUTIVE SUMMARY

CLIENT.....	Acorn Bioenergy
CONSULTANT.....	Bradley Murphy Design Ltd.
SITE	
Location.....	Ashton Keynes AD Facility, Wiltshire
National Grid Reference...	Approx. centre SU 03979 96156
Over-view	The Site has an approximate area of 7 hectares and comprises two parcels of cereal cropland with associated peripheral and intersecting hedgerows and mature trees. The Site is accessed via Ashton Road, which is situated directly east of the Site, connecting South Cerney to Ashton Keynes.
Landscape context	The surrounding landscape is dominated by arable fields and numerous large waterbodies and wetland habitats associated with Cotswolds Water Park. The nearest urban environment to the Site is South Cerney and Ashton Keynes. South Cerney is a village and civil parish located ~500 m northeast of the Site and falls under Gloucestershire County. Ashton Keynes is a village located in the north of Wiltshire, approximately 1.9 km south of the Site. The closest linear urban feature is Ashton Road, but continuing further east is the A419, approximately 3.6 km from the Site boundaries. The Site is surrounded by several industrial facilities, including the Cerney Wick Quarry, Cirencester Sewage Treatment Works, and Aggregate Industries Cement Works directly west of the Site. These are located within the Cotswolds Water Park and are characterised by bare, disturbed ground with minimal vegetation.
DEVELOPMENT & PLANNING BACKGROUND	
Proposed works.....	The Construction and operation of an anaerobic digestion facility, ancillary infrastructure and the construction of a new access from Ashton Road, Ashton Keynes, Wiltshire.
Planning stage.....	Full Planning Application (Wiltshire County Council planning application reference: PL/2023/03359).
ECOLOGICAL BACKGROUND	
General.....	A preliminary Ecological Appraisal was previously undertaken for the Site by SLR Consulting Ltd in 2023. Further Phase II surveys and assessments were undertaken in 2023, including bat emergence surveys, a biodiversity net gain assessment of the Site, and an environmental assessment. The previous Biodiversity Net Gain (BNG) assessment conducted by SLR in 2023 estimated the Site would achieve a 19% BNG habitat score, and a 102% gain in linear habitat (hedgerow). Following these assessments, an updated ecological assessment (Ref: BMD.25.0063.RPE/P1.001) of the Site was undertaken by BMD in July 2025, which assessed the need for Phase 2 surveys and initial opportunities for habitat enhancement and creation required to inform the outline planning application.
ASSESSMENT	
Objectives.....	To provide baseline data pertaining to potential biodiversity net gain as a result of the current development proposals for the Site.
Approach.....	Quantitative Biodiversity Net Gain Assessment using The Statutory Biodiversity Metric.
Date.....	September 2025.
RESULTS & CONCLUSIONS	
Quantitative (predicted Biodiversity Net Gain).....	As demonstrated, a positive habitat biodiversity unit change of 3.21 units (20.33%) is anticipated based on the current designs for the Proposed Scheme. The outcome results also indicate a predicted positive change in hedgerow unit change of 3.26 units (72.18%).
Qualitative	Watercourse units do not apply in this case. In addition to this quantitative assessment a number of qualitative gains are also considered to be achievable.
RECOMMENDATIONS	
Opportunities for habitat enhancement include planting native and wildlife-friendly species within any soft landscaping, and the creation of linear woodland. Linear features will be enhanced and created both on and off-Site.	

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1. INTRODUCTION

1.1 Background Information

- 1.1.1 Bradley Murphy Design Ltd. (BMD) was commissioned by Acorn Bioenergy in June 2025 to undertake an Ecological Assessment of their site: Ashton Keynes, Wiltshire—hereafter referred to as ‘the Site’. The Site is approximately centred on national grid reference: SU 03979 96156. A plan depicting the Site’s location is provided in the Appendix.
- 1.1.2 The current application (Wiltshire Council reference: PL/2023/03359) was originally submitted and validated in 2023, predating the start of the mandatory BNG regime under the Environment Act 2021. This report updates the baseline and assessment from the initial 2023 SLR Biodiversity Net Gain report, accounting for minor design changes. This is not a new application or a post-determination variation, but a continuation of the original 2023 application. As such, the mandatory BNG requirements under the Environment Act 2021 do not apply.
- 1.1.3 The following assessments were completed in September 2025:
- A quantitative assessment of predicted biodiversity net gain post-development compared with a ‘no development’ situation using a biodiversity impact matrix has been completed (current document); and,
 - A qualitative assessment of net gain associated with new habitat creation and provision of other enhancements such as species features.
- 1.1.4 This report accompanies and presents the results of the biodiversity impact calculation (provided in the Appendices) undertaken at the Site to demonstrate net gain of biodiversity as a result of the proposals, hereafter referred to as the ‘Site’.

1.2 Proposed Development

- 1.2.1 The Construction and operation of an anaerobic digestion facility, ancillary infrastructure and the construction of a new access from Ashton Road, Ashton Keynes, Wiltshire.

1.3 Site Context

Historic Context

- 1.3.1 Historic aerial imagery and maps indicate that the Site and the surrounding area have undergone some significant changes in the past several decades. The most notable of which being the formation of nearby water bodies, lakes and ponds associated with the Cotswold Water Park. This began in the 1960s as a result of quarrying, allowing water bodies to form ~500 m northeast and ~600 m south of the Site. Whilst there has not been significant expansion observed by nearby residential areas of South Cerney and Ashton Keynes, there have been more recent developments, one of which being the Hoburne Cotswolds Holiday Park. Other significant features including the Ashton Road bordering the east boundary of the Site running North to South, and other nearby main roads (Spine Road and Ewen Road) have remained unchanged since approximately the 1940s.

Present Context

- 1.3.2 The Site is approximately 7 ha in size, located in the North of Wiltshire close to the Gloucestershire boundary, and is centred between National Grid Coordinates of SU 03979 96156. The Site is approximately 1.9 km north of Ashton Keynes.
- 1.3.3 The Site comprises two areas of arable cropland divided by an intersecting hedgerow, with one full field parcel to the north, and a section of cropland to the south. The Site boundary is lined with hedgerows and mature trees and is situated on Ashton Down. The Site borders neighbouring arable land with Ashton Road running North to South along its eastern border. Industrial parks, such as an aggregate and concrete distribution facility, are located ~270 m southeast of the Site. Cotswold Water Park and its associated water bodies are located as close as ~350 m east and ~600 m south of the Site.
- 1.3.4 The Site is accessed by Ashton Road which borders the east of the Site, running north to south. The Site is surrounded by hedgerows and mature trees, and is divided by an intersecting hedgerow that divides the northern and southern field parcel, located within the Site. The Site is surrounded by open flat arable land, with the exception of the southeast, where a woodland block and lake associated with the Cotswold Water Park and Whitefriars Sailing Club is located.
- 1.3.5 The surrounding land is dominated by arable fields, which encompass both the Site and Cotswold Water Park. The nearest urban environment to the Site is South Cerney and Ashton Keynes. South Cerney is a village and civil parish located ~500 m northeast of the Site and falls under Gloucestershire County. Ashton Keynes is a village located in the north of Wiltshire, approximately 1.9 km south of the Site. The closest linear urban feature is the Ashton Road, but continuing further east is the A419, approximately 3.6 km from the Site boundaries.
- 1.3.6 Several industrial sites, including mineral extraction, sewage treatment facilities, and mineral processing such as cement works, also surround the Site. These include, but are not limited to, Cerney Wick Quarry to the east, Cirencester Sewage Treatment Works to the north, and Aggregate Industries directly southeast of the Site. These are interspersed within Cotswolds Water Park, and are mostly comprised of bare ground and disturbed areas with little vegetation.
- 1.3.7 The neighbouring fields of the Site are chiefly arable with linking hedgerows and woodland blocks can be found throughout these areas.
- 1.3.8 Considering the outlined above contextual features regarding the Site and its surrounding landscape, while there are some dispersal barriers for terrestrial fauna including main roads like Ashton Road, the arable landscape with associated hedgerows and nearby wetland areas provides suitable connectivity to the Site and surrounding areas; it is estimated that dispersal capacity of terrestrial fauna to/from the Site is good. It is further estimated that more mobile, flying species, such as bats, birds, and insects, would be more readily able to commute to the Site from surrounding habitats.

1.4 Ecological Context

- 1.4.1 A Preliminary Ecological Appraisal (PEA) and Biodiversity Net Gain (BNG) Assessment was completed in 2023 by SLR Consulting Ltd, and the BNG report concluded:
- 1.4.2 *“The assessment of the proposed development against the current baseline indicates that an increase in biodiversity performance of the Site of approximately 19% in habitat and 102% in hedgerow can be achieved. This is subject to appropriate planting plans and management plans being developed to optimise the delivery of biodiversity performance on the Site and to realise its intended out-turn condition.”*
- 1.4.3 The assessment included both on-Site and off-Site habitat retention, enhancement, and creation. It was estimated that the creation of new urban habitats (developed land and sealed surfaces) and natural habitat features, such as other neutral grassland, mixed scrub, and tree planting, would result in a minimum BNG score of >10%. Furthermore, retention and creation of new on-Site and off-Site hedgerows would adequately mitigate for any lost hedgerow sections, resulting in >10% BNG of hedgerow features.
- 1.4.4 An updated ecological assessment of the Site was undertaken by BMD in July 2025 that assessed the need for Phase 2 surveys and initial opportunities for habitat enhancement and creation required to inform the outline planning application. Further details of this assessment can be found within the supporting Preliminary Ecological Assessment (Report Ref BMD.25.0155.RPE-P1.001).
- 1.4.5 Planning application PL/2023/03359 was validated in 2023, prior to the commencement of the statutory Biodiversity Net Gain (BNG) requirements. The current ecology submissions serve as an evidence refresh to keep the baseline and assessment up-to-date and to reflect minor design changes. These updates do not constitute a new application.

2. BIODIVERSITY NET GAIN

2.1 Biodiversity Net Gain

2.1.1 Biodiversity Net Gain is defined as:

- “Development that leaves biodiversity in a better state than before, and an approach where developers work with local governments, wildlife groups, landowners and other stakeholders in order to support their priorities for nature conservation”. (Baker et al., 2019)

2.1.2 Previously, various percentage targets are used across the country and in schemes such as BREEAM, it is noted that there is no consistent agreed target percentage gain at either national or local level. However, as of November 2021, The Environment Act 2021 states under Schedule 14 that provision are to be made “*for biodiversity gain to be a condition of planning permission in England.*” (HM Government 2021). As of February 2024, a minimum 10% net gain is mandatory. However, as this planning application was submitted and validated prior to this date, the mandatory Biodiversity Net Gain (BNG) requirements do not apply in this instance.

2.1.3 As stated in the previous BNG report by SLR (reference: 404.11923.00002), requirements for BNG have been set out through recent appeal decisions which have clarified that:

- “*the 10% biodiversity net gain requirement set out in the Act is not yet law and is not applicable to these appeals*”;
- “*Paragraph 174 of the Framework [the NPPF encourages applicants to], ... seek a net gain in biodiversity without identifying a specific percentage...*”
- *The relevant Core Strategy may “...seek a net gain in biodiversity without identifying a specific percentage...”; and*
- “*A net gain of just 1% would be policy compliant in these circumstances.*”

2.1.4 The current application (Wiltshire Council ref: PL/2023/03359) was submitted and validated in 2023, prior to the commencement of the statutory BNG regime. The current ecology submissions represent an update to the baseline and assessment to reflect minor design amendments and to maintain the evidence base during determination. This is not a new application or a post-determination variation, but a continuation of the original 2023 application. As such, the mandatory BNG requirements under the Environment Act 2021 do not apply.

2.1.5 In these circumstances, the approach to BNG is guided by the National Planning Policy Framework (NPPF, 2021) and the Wiltshire Core Strategy, both of which encourage applicants to seek a net gain in biodiversity without prescribing a minimum percentage. Case law and appeal decisions confirm that even modest gains (e.g. 1%) can be considered policy-compliant where no statutory minimum applies.

2.1.6 Notwithstanding the above, the Applicant has chosen to present the BNG position transparently using the Statutory Biodiversity Metric (DEFRA, 2023) to demonstrate that the development delivers a measurable improvement over the verified baseline. The package of on-Site enhancements (including updated landscape mitigation within the blue line) achieves a net gain in both habitat units and linear features. Replacement planting for the felled ash tree is incorporated into the landscape scheme, contributing to this overall betterment.

- 2.1.7 Should the Local Planning Authority (LPA) consider it necessary, the voluntary net gains could be secured by condition through delivery and management of the submitted Landscape and Ecological Management measures.
- 2.1.8 As the planning application was validated prior to the February 2024, the approach to biodiversity gain will be guided by the principles outlined in the earlier National Planning Policy Framework (2021) and local Core Strategy, which encourage a net gain without specifying a minimum percentage. As noted in previous appeal decisions, a gain as low as 1% could be considered policy-compliant in these circumstances.

2.2 Biodiversity Net Gain Good Practice

- 2.2.1 In 2016 (Baker, 2016) a set of Good Practice Biodiversity Net Gain Principles were defined and underpin the current best practice guidance for development (Baker *et al.*, 2019). These principles are:
- Principle 1: Apply the mitigation hierarchy;
 - Principle 2: Avoid losing biodiversity that cannot be offset elsewhere;
 - Principle 3: Be conclusive and equitable;
 - Principle 4: Address risk;
 - Principle 5: Make a measurable net gain contribution;
 - Principle 6: Achieve the best outcomes for biodiversity;
 - Principle 7: Be additional;
 - Principle 8: Create a net gain legacy;
 - Principle 9: Optimise sustainability; and
 - Principle 10: Be transparent.

3. APPROACH

3.1 Overview

- 3.1.1 This assessment is being completed in accordance with the Good Practice Biodiversity Net Gain Principles set out in Section 4.
- 3.1.2 Details of the approach used to determine the baseline biodiversity conditions at the Site and predicted biodiversity net gain of the Site are documented below.
- 3.1.3 The Site was subject to a habitat survey during July 2025. This included a review of the current condition of the habitats on Site.
- 3.1.4 This biodiversity net gain assessment uses the Statutory Biodiversity Metric in line with best practice owing to protected species being present on the Site.
- 3.1.5 This assessment has been updated to reflect changes based on the Biodiversity Net Gain (BNG) report from SLR (2023). This is due to changes in the landscape and development designs and additional off-Site habitat creation. Furthermore, a shift from the previous non-statutory BNG metric (version 3.1) to the new, statutory BNG metric, as per best practice. This change in methodology may have influenced the final results.

3.2 Biodiversity Net Gain

- 3.2.1 The quantitative assessment for this biodiversity gain plan uses the Statutory Biodiversity Metric to provide a transparent and replicable numeric value of biodiversity before and after enhancement. The metric only considers habitats and does not take protected and notable species into account.
- 3.2.2 The values take a number of habitat attributes into consideration, these are displayed below within Table 3.1. These habitat attributes are either pre-populated by the Statutory Biodiversity Metric parameters or determined by information available on the pre-development baseline habitats or the post-development predicted habitats and professional judgement.

Table 3.1 The Statutory Biodiversity Metric habitat attributes and pre-populated status

Habitat Attribute	Pre-populated Status
Area or length	Determined by available information and professional judgement
Distinctiveness	Distinctiveness is a measure based on the type of habitat and its distinguishing features. Professional survey is required to determine habitat type. The biodiversity metric tool automatically assigns distinctiveness category to selected habitats.
Condition	Determined by available information and professional judgement using the metric condition assessments
Strategic significance	Determined by available information and professional judgement
Time to target condition	Determined by metric parameters
Difficulty to create/restore	Determined by metric parameters

- 3.2.3 An overview of the Statutory Biodiversity Metric principles, rules and key components are described in the following sections.

3.3 Area Habitats, Linear Features & Point Features

- 3.3.1 Area habitats such as 'modified grassland' are measured in hectares within the Statutory Biodiversity Metric, while linear features such as 'Native hedgerow' are measured in metres. The only point features included in the metric are trees, e.g. 'Urban tree', these are measured in hectares based on their tree canopy, calculated using the 'Tree helper' tool of the Statutory Biodiversity Metric.
- 3.3.2 Linear features are divided into 'Hedgerows' and 'Watercourses' and are dealt with separately in the metric. Hedgerows are included within this biodiversity net gain assessment of the Site.
- 3.3.3 The area of a watercourse may be recorded in the area module as the category 'watercourse footprint'. There are no biodiversity units associated with this category and all biodiversity units generated by watercourses are reported within the watercourse tab.
- 3.3.4 Point features such as 'Urban tree' are allocated size categories which are then summed and calculated as a canopy area in hectares. Table 3.2 displays these size classes and area equivalents below, further information can be found within the Statutory Biodiversity Metric User Guide (Department for Environment, Food and Rural Affairs, 2025). The biodiversity metric uses set values to represent the area of trees depending on their diameter at breast height. This value is a representation of canopy biomass, and is based on the root protection area formula, derived from BS 5837:2012. The metric will:
- Account for each individual tree within a group or block of trees;
 - Record the habitat underneath the tree canopy separately;
 - Not reduce any area generated by the tree helper;
 - Not deduct the area of individual trees from other habitats; and
 - Make clear in the user comments how many trees contribute towards the total area.
- 3.3.5 'Individual tree' area is not added onto the total site area, as these point features are treated as a secondary layer that sits above the total site area on the ground. However, the biodiversity value provided by the 'Individual tree' area is added onto the total site biodiversity value.

Table 3.2 Tree size classes and area equivalents (DEFRA, 2025)

Size	Diameter at Breast Height (cm)	Metric area Equivalent (ha)
Small	7-30	0.0041
Medium	31-60	0.0163
Large	60-90	0.0366
Very large	90	0.0765

- 3.3.6 Habitat distinctiveness is allocated as one of five possible categories, these categories are automated within the Statutory Biodiversity Metric. Table 3.3 below displays the distinctiveness

categories, scores and criteria, further information can be found within the Statutory Biodiversity Metric User Guide (Department for Environment, Food and Rural Affairs, 2025).

Table 3.3 The Statutory Biodiversity Metric distinctiveness categories, scores and criteria (DEFRA 2025).

Distinctiveness	Score	Criteria
Very High	8	<i>"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. Small amount of remaining habitat with a high proportion unprotected by designation. Endangered or Critical European red list habitats."</i>
High	6	<i>"Priority Habitats as defined in Section 41 of the NERC Act requiring conservation action. Remaining Priority Habitats not in very high distinctiveness band & other red list habitats."</i>
Medium	4	<i>"Semi-natural habitats not classed as a Priority Habitat but with significant wildlife benefit e.g., mixed scrub. One Priority Habitat (arable field margins)."</i>
Low	2	<i>"Habitat of low biodiversity value e.g. temporary grass and clover ley. Agricultural and Urban land of lower biodiversity value."</i>
Very Low (hedgerow)	1	<i>"Little or no biodiversity value."</i>
Very Low (area & watercourse)	0	<i>"Little or no biodiversity value."</i>

3.4 Habitat Condition

3.4.1 Habitat condition is allocated as one of seven possible categories. These categories are determined by information available on the pre-development baseline habitats or the post-development predicted habitats. Professional judgement is used to interpret the information available and applied when using the habitat condition assessment sheets when assessing whether a habitat meets or fails condition criteria set out by the Statutory Biodiversity Metric.

3.4.2 These condition criteria are specific to each habitat type, further information can be found within the Statutory Biodiversity Metric User Guide and accompanying condition sheets (Department for Environment, Food and Rural Affairs, 2024). Where the same habitat types occur within the Site but have different condition categories, they have been assessed separately within the metric. Table 3.4 below displays the condition categories and scores.

Table 3.4 The Statutory Biodiversity Metric condition categories and scores (DEFRA, 2025)

Condition	Score
Good	3
Fairly Good	2.5
Moderate	2
Fairly Poor	1.5
Poor	1
Condition Assessment N/A	1
N/A - Other	0

3.5 Irreplaceable Habitats & Very High Distinctiveness Habitats

3.5.1 Irreplaceable habitats are defined as:

- “Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen.” (NPPF, 2025)

3.5.2 Due to the nature of irreplaceable habitats, their biodiversity value cannot be quantified and therefore these habitats are dealt with separately within the Statutory Biodiversity Metric. Irreplaceable habitats (as provided for in secondary legislation for BNG) do not have a BNG requirement as they are too valuable to be compensated for. As such, any losses to irreplaceable habitats cannot be calculated by the biodiversity metric tool and they are removed from the baseline. An inventory of these habitats is compiled within the ‘Irreplaceable Habitats’ tab of the metric, where bespoke compensation agreed with the relevant consenting body is detailed. However, it should be noted that any impact on an irreplaceable habitat is strongly advised against, as bespoke compensation will only be agreed upon in exceptional circumstances.

3.5.3 Very high distinctiveness habitats (VHDH) are defined as:

- “VHDH are highly threatened, internationally scarce habitats which require conservation action. Impacts to these habitats should be avoided in line with planning policy.” (DEFRA, 2025).
- These habitats were described in further detail within the previous BNG guidance and include:
 - “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, for example blanket bog.
 - Small amount of remaining habitat with a high proportion unprotected by designation.
 - Critically Endangered European Red List habitats.” (Panks et al. 2023c).

3.5.4 Similarly to irreplaceable habitats, the very high distinctiveness nature of these habitats is difficult to quantify and therefore these habitats also require bespoke compensation within the Statutory Biodiversity Metric. VHDH are included within the main ‘Baseline, Enhancement & Creation’ tabs of the metric. Impact on or creation of these habitats will require comprehensive compensation or justification to satisfy the relevant consenting body.

3.5.5 Refer to The Biodiversity Metric 4.0 User Guide – Technical Annex 2 (Panks *et al.* 2023c) for a full list of VHDH.

3.6 Metric Principles & Rules

3.6.1 The Statutory Biodiversity Metric may be used to carry out assessments of biodiversity net gain and inform plans and decision making if the metric principles and rules are adhered to. Table 3.5 below lists the principles and rules of the Statutory Biodiversity Metric. Further details of these principles and rules can be found within the Statutory Biodiversity Metric User Guide (DEFRA, 2025).

Table 3.5 The Statutory Biodiversity Metric principles and rules (DEFRA, 2025)

Principles	
1	"The metric assessment should be completed by a competent person."
2	"The use of this biodiversity metric does not override existing biodiversity protections, statutory obligations, policy requirements, ecological mitigation hierarchy or any other requirements. This includes consenting or licensing processes, for example woodlands."
3	"This biodiversity metric should be used in accordance with established good practice guidance and professional codes."
4	"This biodiversity metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice."
5	"Biodiversity units are a proxy for biodiversity and should be treated as relative values."
6	"This biodiversity metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance."
7	"Habitat interventions need to be realistic and deliverable within a relevant project timeframe."
8	"Created and enhanced habitats should be, where practical and reasonable, local to any impact and deliver strategically important outcomes for nature conservation."
9	"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."
Rules	
1	"The trading rules of this biodiversity metric must be followed."
2	"Biodiversity unit outputs, for each type of unit, must not be summed, traded, or converted between types. The requirement to deliver at least a 10% net gain applies to each type of unit."
3	"To accurately apply the biodiversity metric formula, you must use the biodiversity metric calculation tool or small sites biodiversity metric tool (SSM) for small sites. The tools remove the need for a user to manually calculate the change in biodiversity value. The tool will summarise the results of the calculation and inform a user whether the biodiversity net gain objective has been met."
4	"In exceptional ecological circumstances, deviation from this biodiversity metric methodology may be permitted by the relevant planning authority."

3.7 Pre-development baseline habitats

- 3.7.1 The baseline habitat data from which net biodiversity change is calculated using the UKHab Habitat Survey completed by BMD in July 2025 (BMD.25.0155.DRE.001) and is provided in the Appendices: Plans. The UKHab Habitat Classification Survey was conducted by BMD to industry standard at the time (UKHab, 2023).

3.8 Predicted post-development habitat

- 3.8.1 The Statutory Biodiversity Metric requires the following information to inform the predicted post-development development habitats:
- Habitat type;

- Habitat area or length;
- Habitat condition;
- Irreplaceable habitat; and
- Strategic significance.

3.8.2 Plans depicting the post-enhancement retained, enhanced and created habitats of the Site are provided in the Appendices.

3.9 Methodology for drawing and measuring

3.9.1 Pre-development and post-development data has been imported to GIS software (ArcGIS Desktop 10.8 & ArcGIS Pro 3.1) to enable a direct comparison between each scenario and an accurate, replicable method of measuring. Measurements taken from the GIS have been input into the assumptions table and then into the Statutory Biodiversity Metric calculation tool that has been used for this assessment.

3.9.2 The full completed Statutory Biodiversity Metric Calculation Tool with supporting assessor comments is appended to this technical note.

3.10 Auditing biodiversity net gain as the development progresses

3.10.1 The specifics of the use of the Statutory Biodiversity Metric in auditing biodiversity net gain achievements, as the development progresses, is currently under refinement and will be developed further as part of the secondary legislation required for implementation of the Environment Act 2021.

3.10.2 The predicted post-development baseline will be calculated from the following data;

- Plans provided in the Appendices.
- Detailed plans, drawings, documents and specifications submitted for planning.
- Construction issue plans, drawings, and specifications (if available).
- As built information (if available).

4. APPLICATION OF GOOD PRACTICE BIODIVERSITY NET GAIN PRINCIPLES

- 4.1.1 Throughout the progression and implementation of the Scheme, the Good Practice Biodiversity Net Gain Principles have been applied.
- 4.1.2 Table 4.1 demonstrates how each principle, listed in Section 1, has been applied since the Ecological Assessment completed in 2025 and will be applied going forward.

Table 4.1 Application of the Good Practice Biodiversity Net Gain Principles

Principle	Application of the principles
Principle 1: Apply the mitigation hierarchy	High value habitats such as trees and hedgerows have been designed into the scheme to be retained where feasible, with minimal loss, and will be appropriately compensated for through woodland and hedgerow planting. There is some loss of low value habitats, however these losses have been compensated accordingly.
Principle 2: Avoid losing biodiversity that cannot be offset elsewhere	No irreplaceable habitats will be affected by the development.
Principle 3: Be inclusive and equitable	The Scheme will deliver Biodiversity Net Gain (BNG) within the locality where biodiversity losses occur. Off-site habitat creation will provide additional BNG and improve connectivity between the Site and linear habitat features.
Principle 4: Address risk	The proposed auditing approach allows for risk to be assessed at appropriate intervals to ensure, as a minimum, the proposed future net gain will be achieved by the end of the development build-out period. Habitat creation risks are provided in the detail of the metric by default.
Principle 5: Make a measurable net gain contribution	Both quantitative and qualitative measures have been put in place to ensure that net gain is measurable. These are documented in this current report.
Principle 6: Achieve the best outcomes for biodiversity	A robust biodiversity baseline was completed in 2025 following best practice guidelines. This has allowed informed decisions to be made in relation to incorporating biodiversity into the most recent development proposals. The most recent baseline conditions have informed detailed soft landscape design and composition that is appropriate for the local conditions.
Principle 7: Be additional	The newly created habitats will be reflective of the wider landscape and will provide a higher value habitat in a previously low-value area.
Principle 8: Create a net gain legacy	The designs of the Scheme illustrate the landscape areas to be implemented within the Scheme which will be subject to ongoing management. This will help ensure a net gain legacy is achieved.
Principle 9: Optimise sustainability	By increasing floral diversity and retaining existing hedgerows, the newly enhanced habitats will contribute to ecological resilience, support local biodiversity, and improve the Site's overall sustainability. The retention of established vegetation not only provides continued ecosystem services such as carbon sequestration and air quality improvement but also maintains habitat connectivity, reducing fragmentation and supporting a wider range of species. These measures align with Biodiversity Net Gain principles and ensure that sustainability is integrated into the long-term management of the Site.
Principle 10: Be transparent.	The detailed results of the Biodiversity Net Gain assessment are provided with this report.

5. APPLICATION OF PROFESSIONAL JUDGEMENT

5.1 Pre-Development Habitats

- 5.1.1 Table 5.1 below summarises the professional judgements made in relation to the baseline condition of habitats pre-development based on the available survey and data. Where information is lacking or not detailed enough, judgements are made based on standard default conditions for typical habitat types.

Off-Site Habitats

- 5.1.2 The off-Site area is also characterised by arable land mapped as UKHab type c1c – Cereal crops. As with the on-Site fields, the habitat comprises intensively managed cropland, dominated by barley cultivation at the time of survey. The sward is uniform and of limited botanical diversity, with occasional patches of arable weeds along tramlines and field edges. Areas of bare or compacted ground were also observed, indicative of poor soil structure and routine agricultural disturbance. Overall, the habitat offers negligible ecological value beyond foraging opportunities for common farmland birds and mammals, and supports few structural or floristic features of interest. In accordance with the UKHab guidance, a baseline condition of N/A has been applied to this habitat type, reflecting the inherent limitations of intensively farmed arable land.

5.2 Post-Development Habitats

- 5.2.1 Table 5.2 below summarises the professional judgements made in relation to the predicted condition of created habitats. These judgements are based on the standard landscape types and aspirations for commensurate sites and are informed by a number of approved/verified.
- 5.2.2 No irreplaceable habitats were recorded within the baseline.
- 5.2.3 Should detailed landscape proposals differ significantly from those used in the current calculation, an updated biodiversity impact assessment will be required to ensure continued net gain of biodiversity.

Off-Site Habitats

- 5.2.4 The off-Site habitat area located northwest of the Site will be enhanced from its current state as cereal crops to good condition neutral grassland. This area was not included in the previous Biodiversity Net Gain (BNG) assessment conducted by SLR in 2023. Its inclusion is projected to yield a significant increase in BNG credits, and compensate for habitat loss within the Site.
- 5.2.5 Converting the existing cropland within the Site to wildflower grassland will create a higher-value, alternative habitat that supports greater biodiversity and ecological functionality. The ground will be seeded with a native meadow mix, which will significantly boost foraging opportunities for invertebrates. This, in turn, will provide enhanced food resources for a range of notable and protected species, including nesting birds, small mammals, reptiles, and amphibians. Furthermore, the new habitat will also provide essential ecological connectivity between new linear features on the Site and existing semi-natural habitats to the north and west.

5.3 Statutory Requirements

- 5.3.1 As previously stated, the current application (Wiltshire Council ref: PL/2023/03359) was submitted and validated in 2023, predating the commencement of the statutory BNG regime. In these circumstances, the approach to BNG is guided by the National Planning Policy Framework (NPPF, 2021) and the Wiltshire Core Strategy, both of which encourage applicants to seek a net gain in biodiversity without prescribing a minimum percentage. While a 1% gain would be policy-compliant under these circumstances, the proposed habitat creation is anticipated to exceed the 10% minimum required by the current statutory regime.

Table 5.1 Justification of condition and strategic significance of pre-development baseline habitats for the Site

Habitat Type	Justification	Condition	Strategic Significance
u1b – Developed land; sealed surface	The Site is accessed via Ashton Road, which runs directly east of the Site boundary. The hardstanding features associated with the Site entrance are situated towards the southeast extent of the Site. The ground is impermeable tarmac, with no signs of cracks, damage or emergent vegetation.	N/A	Area/compensation not in local strategy/no local strategy
c1c – Cereal crops	The Site is dominated by cropland, with barley covering most of the field parcels. The vegetation is uniform in structure and lacks management in some locations, as arable weeds were abundant in some instances. Furthermore, bare patches of ground were also noted in places, suggesting poor ground conditions, damage, and/or inadequate management.	N/A	Area/compensation not in local strategy/no local strategy
c1c – Cereal crops (off-Site)	A small, roughly square parcel of cropland continues northeast of the Site boundary and includes the same characteristics and species composition mentioned above. The parcel of land is bounded to the north and west by native hedgerows.	N/A	Area/compensation not in local strategy/no local strategy
h2a6 – Other native hedgerow	The cropland within the Site is surrounded and intersected by several species-poor native hedgerows. The hedgerows vary in location, size, and composition. They are generally dominated by hawthorn, but also regularly include ash and blackthorn. Other frequently recorded species include elder and field maple. The ground flora across the hedgerows is dominated by false oat grass, with frequent common nettle and lesser burdock, as well as other plants such as wild chamomile and cocksfoot. The hedgerows were not assessed as being in “good condition”, predominantly due to damage from ongoing agricultural practices, and evidence of nutrient enrichment associated with the application of fertilisers.	Moderate	Area/compensation not in local strategy/no local strategy
h2a6 – Other native hedgerow (off-Site)	These linear features are located directly adjacent to the Site and are associated with hedgerows H3 and H4. They exhibit the same species composition and physical characteristics mentioned above. There is a small gap at the northwestern corner, which permits access to neighbouring fields.	Moderate	Area/compensation not in local strategy/no local strategy
Rural tree	All scattered trees within the Site boundary were recorded within the hedgerow features, and these were predominantly mature ash and an individual mature oak tree. The tree specimens, whilst exhibiting possible signs of poor health such as ash dieback and drought, are still assessed as being in good condition due to the absence of gaps in the canopy and little impact from human disturbance.	Good	Area/compensation not in local strategy/no local strategy
Notes ¹ See the ‘Assessor Comments’ in the completed Statutory Metric with regard to the identification of these habitats.			

Table 5.2 Justification of condition and strategic significance of post-development created & retained habitats for the Site

Habitat Type	Justification	Condition	Strategic Significance
Proposed			
u1b – Developed land; sealed surface	This area includes new hardstanding with the creation of roads throughout the Site, parking areas, ramps, and trailer bays. The access roads will link to the existing bellmouth located at the southeast periphery, and travel east and north through the middle of the Site. Other sections of hardstanding surround the newly developed buildings and structures. This will include the removal of areas of cropland and hedgerow H2, which intersects the Site (as illustrated on drawings BMD.25.0155.DRE.001).	N/A	Area/compensation not in local strategy/no local strategy
u1b5 – Building	This area includes introducing new buildings with the creation of newly constructed silage clamps and associated infrastructure. This will include the removal of large areas of cropland and hedgerow H2, which intersects the Site (as illustrated on drawings BMD.25.0155.DRE.001). Buildings and structures comprise storage for silage and other materials, anaerobic digesters, processing facilities, tankers, monitoring stations, and other smaller associated buildings.	N/A	Area/compensation not in local strategy/no local strategy
g3c – Other neutral grassland (off-Site)	Both on-Site and off-Site lowland meadow habitat will be created as part of the development. A roughly square parcel of land situated northwest of the Site will be seeded with EM1 general-purpose meadow mixture (or similar). Species typically associated with this seed mix and habitat type include common knapweed, oxeye daisy, musk mallow, as well as grass species such as smooth meadow-grass, crested dogs tail, and red fescue. The grass sward will be managed to a “good” condition, as detailed in the Statutory Biodiversity Metric Condition Assessment spreadsheet. The grass sward should comprise a high proportion of indicator species relevant to the habitat type, sward height should be varied, cover of bare ground between 1-5%, encroaching bracken and bramble should be regularly cleared, and measures to ensure no excessive damage to the ground or encroachment of invasive non-native species.	Good	Area/compensation not in local strategy/no local strategy
g3c – Other neutral grassland	Thin strips of land situated adjacent to existing hedgerows (not including hedgerow H2), newly developed land, and planted woodland will be seeded with EM6 meadow mixture (or similar). This will comprise species typically associated with alkaline soil types such as yarrow, lady's bedstraw, bladder campion, bird's foot trefoil, ribwort plantain, cowslip, and grasses like red fescue, crested dogs tail, sheep's fescue, and quaking grass. Also, a small parcel of land situated within and towards the south-east extent of the Site will be seeded with this mix and managed as good condition other neutral grassland. Seeding and management of the grassland strips will significantly enhance the Site, include greater floral diversity, and provide connective links through the Site.	Moderate-Good	Area/compensation not in local strategy/no local strategy
h2a5 – Species rich native hedgerow	One intact hedgerow is proposed along the southern boundary of the Site to provide some additional connectivity between the existing hedgerows and newly created linear woodland. It is proposed to be in moderate condition with species such as field maple, hazel, hawthorn, blackthorn, and dogrose.	Moderate	Area/compensation not in local strategy/no local strategy

Habitat Type	Justification	Condition	Strategic Significance
h2a5 – Species rich native hedgerow (off-Site)	One intact hedgerow is proposed along the northwestern boundary of the Site to act as a landscaping screen between the proposed silage clamps and off-Site wildflower meadow. It is proposed to be in moderate condition with species such as field maple, hazel, hawthorn, blackthorn, and dogrose. Furthermore, a small section of hedgerow will be created at the northwestern corner of the Site and will connect hedgerows H3 and H4.	Moderate	Area/compensation not in local strategy/no local strategy
w1h – Other woodland mixed	Linear strips of woodland planting will be carried out along the peripheries of the new developed hardstanding and structures. Species composition will include a mix of woodland planting including species such as field maple, hornbeam, beech, apple, wild cherry, and pedunculate oak. Additionally, understory scrub planting will also be conducted, with species such as dogwood, hazel, hawthorn, blackthorn, holly, and elder. The woodland will be managed to a moderate condition by maintaining a mixed age distribution, limiting browsing impacts where feasible, removing invasive non-native species, limiting woodland disturbance, and meeting other criteria detailed in the Statutory Biodiversity Metric Condition Assessment spreadsheet.	Moderate	Area/compensation not in local strategy/no local strategy
Retained			
u1b – Developed land; sealed surface	The pre-existing access point and bellmouth situated towards the southeast of the Site leading off Ashton Road is to be retained.	N/A	Area/compensation not in local strategy/no local strategy
Enhanced			
h2a5 – Native hedgerow	The hedgerows along the eastern, western, and northern peripheries of the Site will be enhanced from moderate condition to good condition. These can be enhanced through the reduction of excessive fertilisers and ground disturbance through ongoing agricultural practices and regular management. This will eventually lead to a reduction in forbs typically associated with nutrient-enriched soils (e.g. nettles and cleavers) and increase plant diversity.	Good	Area/compensation not in local strategy/no local strategy
Notes			
¹ See the 'Assessor Comments' in the completed Statutory Metric with regard to the identification of these habitats.			

6. RESULTS

6.1 Statutory Biodiversity Metric Results

- 6.1.1 The outcome of the biodiversity net gain assessment for area habitats is provided in Figure 6.1 and detailed in the supporting the Statutory Biodiversity Metric.
- 6.1.2 As demonstrated, a positive habitat biodiversity unit change of 20.33% is anticipated based on the current enhancement proposals associated with the enhancement of grassland, woodland creation, and off-site habitat enhancement. The inclusion of off-Site habitat creation has significantly improved the final BNG score, resulting in an additional five habitat units.
- 6.1.3 The outcome results also indicate a predicted positive change in hedgerow unit change of 72.18%.
- 6.1.4 Watercourse units do not apply in this case.

6.2 Metric Results

- 6.2.1 A full copy of the Metric in Excel format will be supplied separately for detailed reference.

6.3 Trading Rules

- 6.3.1 Although the Statutory Biodiversity Metric has been applied for transparency, it is acknowledged that strict compliance with its trading rules is not a requirement in this case, as the application (Wiltshire Council ref: PL/2023/03359) was validated prior to the commencement of the statutory BNG regime. The proposed development will require the removal of a single mature ash tree within the Site. While individual scattered tree planting is not proposed under the current landscape design, compensatory measures are provided through the creation of dense blocks of species-rich broadleaved woodland and extensive new hedgerow planting across the Site. These measures represent proportionate and policy-compliant mitigation for the tree loss.
- 6.3.2 The conversion of cropland to wildflower grassland within the Site will deliver a higher-value alternative habitat, supporting greater biodiversity and ecological functionality. The areas will be seeded with a native meadow mix, substantially increasing foraging opportunities for invertebrates, and in turn providing enhanced food resources for nesting birds, small mammals, reptiles and amphibians.
- 6.3.3 Retention and enhancement of existing native hedgerows will continue to provide important cover and foraging opportunities for wildlife. The addition of shade-tolerant native shrub species will further strengthen the structure and species diversity of these linear habitats.
- 6.3.4 Further detail on planting specification and management is provided within the submitted landscape scheme (Drawing Ref: P24-1022_EN_010_B_A1 L) and the post-development habitat plan (Drawing Ref: BMD.25.0155.DRE.002).

6.4 Summary

- 6.4.1 The Biodiversity Net Gain (BNG) assessment demonstrates a betterment in BNG unit creation compared to the original metric submitted by SLR in 2023. The current scheme, incorporating proposed BNG mitigation, has achieved this improvement through enhancements to the internal landscaping and the provision of additional wildflower meadow enhancements on adjacent land. While the initial calculation showed a creation of 4.4 BNG units, the final calculated unit creation is 3.21 units; this reduction is due to the application of spatial risk multiplier deductions resulting from the habitat creation being located on off-Site land, despite its direct proximity. This final result of 3.21 BNG units still represents a significant increase over the 2.62 units in the original SLR metric.
- 6.4.2 Whilst the unit creation has increased, the percentage uplift has not increased to the same extent. This is potentially due to the previous metric (version 3.1), used by SLR at the submission stage, applying different distinctiveness bands for linear features such as hedgerows and existing trees. Overall, the BNG score for the proposed development has improved compared to the original assessment.

Fig 6.1. Summary Biodiversity Net Gain Assessment – Habitats calculations for the Site
(see supporting Statutory Biodiversity Metric for detailed results and further information).

Ashton Keynes AD Facility		Return to results menu	
Headline Results			
Scroll down for final results ▲			
On-site baseline	Habitat units	15.78	
	Hedgerow units	4.52	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	15.18	
	Hedgerow units	7.02	
	Watercourse units	0.00	
On-site net change (units & percentage)	Habitat units	-0.60	-3.82%
	Hedgerow units	2.50	55.41%
	Watercourse units	0.00	0.00%
Off-site baseline	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	5.00	
	Hedgerow units	2.99	
	Watercourse units	0.00	
Off-site net change (units & percentage)	Habitat units	5.00	N/A
	Hedgerow units	2.99	N/A
	Watercourse units	0.00	0.00%
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	4.40	
	Hedgerow units	5.50	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	Habitat units	1.19	
	Hedgerow units	2.23	
	Watercourse units	0.00	
FINAL RESULTS			
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	3.21	
	Hedgerow units	3.26	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	20.33%	
	Hedgerow units	72.18%	
	Watercourse units	0.00%	
Trading rules satisfied?		No - Check Trading Summaries ▲	

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8. GLOSSARY

8.1 Scientific Terms and Acronyms

CIEEM Chartered Institute of Ecology and Environmental Management, the professional organisation and provider of professional codes of conduct for ecological consultancy.

NPPF National Planning Policy Framework.

Notable species A species which is listed as a UK Priority Species, carries an unfavourable conservation status (e.g. scarce, rare, threatened, Red-listed), is invasive or is otherwise worthy of note from an ecological perspective.

Protected species A species protected under specific UK or European legislation, including Habitats Directive, Wildlife and Countryside Act.

UK Priority Habitat and species A habitat or species identified as a priority for conservation in accordance with Section 41 of the Natural Environment and Rural Communities Act (2006). Section 40 of the NERC Act 2006 places a duty on public authorities to have regard for the conservation objectives of these habitats / species (also known as Section 41 (S41) habitats/species).

APPENDICES

PLANS & SUPPORTING FIGURES

BMD.25.0155.DRE.001 – Baseline Habitat Map
BMD.25.0155.DRE.002 – Post Development Plan
P24-1022_EN_010_B_A1 L – Landscape Strategy Plan



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Application boundary (70,316.0m²)

Offsite boundary (5,950.6m²)

Baseline Habitat Description

c1c - Cereal crops (70,104.1m²)

u1b - Developed land; sealed surface (211.9m²)

c1c - Cereal crops - offsite (5,950.6m²)

h2a5 - Species-poor native hedgerow with trees, moderate (274.9m)

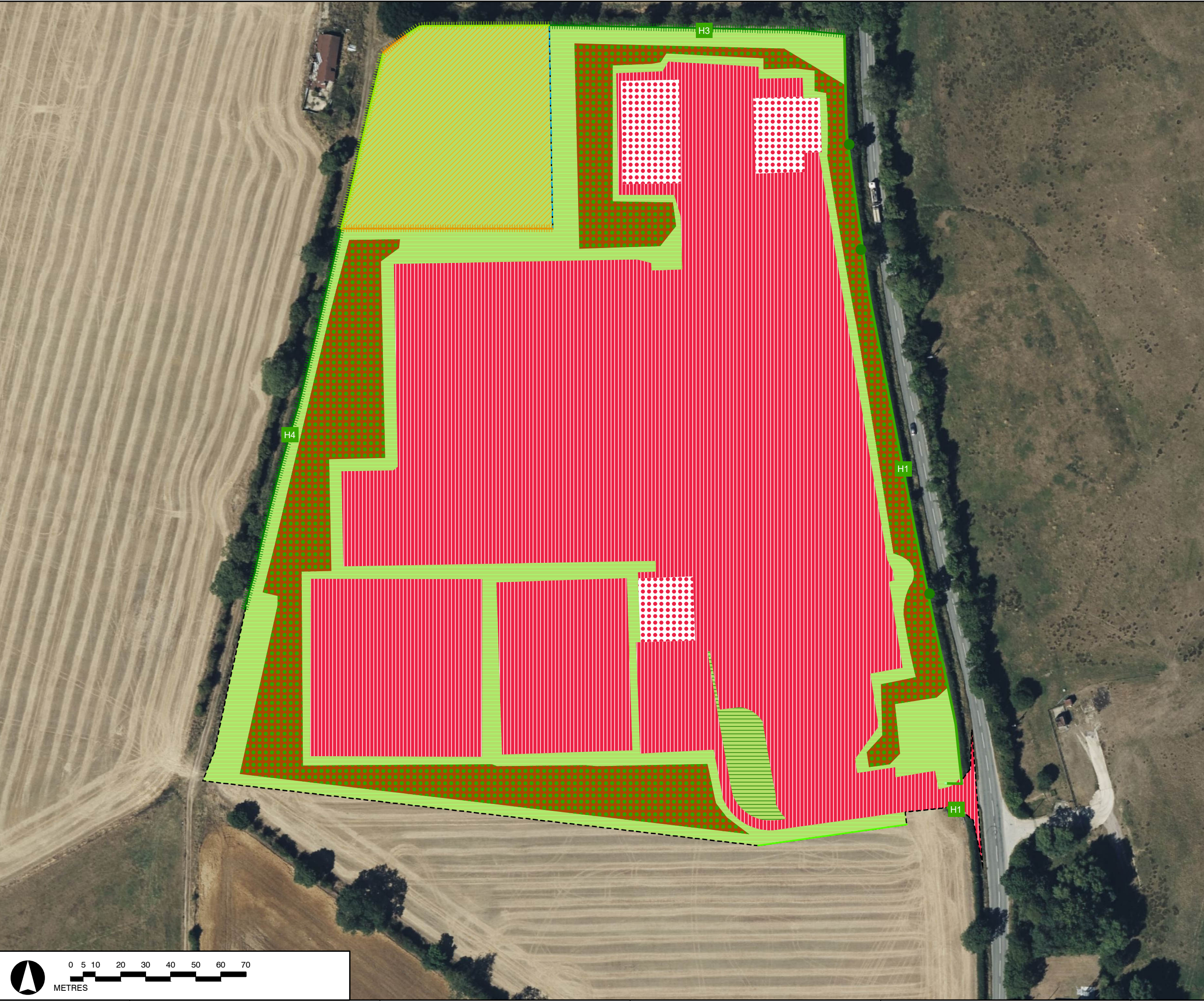
h2a5 - Species-poor native hedgerow, moderate (579.7m)

h2a5 - Species-poor native hedgerow with trees, moderate - offsite (129.9m)

32 - Scattered tree (4)

Target note

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Rev	Description	--	
Purpose of Issue			
PLANNING			
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Client			
ACORN BIOENERGY			
Project			
ASHTON KEYNES AD FACILITY			
Drawing Title			
BASELINE HABITAT MAP			
Drawn	Checked	Approved	Date
MP	AN	JW	23/09/25
Job No.	Scale	Sheet Size	Revision
25.0155	1:1,400	A3	-
Drawing Number			
BMD.25.0155.DRE.001			



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Application boundary (70,316.0m²)

Offsite boundary (5,950.6m²)

Post-Development Habitat Description

g3c - Other neutral grassland, good (751.6m²)

g3c - Other neutral grassland, moderate (11,573.0m²)

u1b - Developed land; sealed surface (44,035.1m²)

u1b5 - Building (2,267.6m²)

w1h - Other woodland; mixed, moderate (11,688.7m²)

g3c - Other neutral grassland, good - offsite (5,950.6m²)

h2a5 - Species-poor native hedgerow with trees, good (274.9m)

h2a5 - Species-poor native hedgerow, good (318.7m)

h2a5 - Species-rich native hedgerow with trees, newly created (60.1m)

h2a5 - Species-poor native hedgerow with trees, good - offsite (129.9m)

h2a5 - Species-rich native hedgerow with trees, newly created - offsite (96.8m)

32 - Scattered tree (3)

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Rev	Description	--

Purpose of Issue

PLANNING

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Client			
ACORN BIOENERGY			
Project			
ASHTON KEYNES AD FACILITY			
Drawing Title			
POST-DEVELOPMENT HABITAT MAP			
Drawn	Checked	Approved	Date
MP	AN	JW	23/09/25
Job No.	Scale	Sheet Size	Revision
25.0155	1:1,400	A3	-
Drawing Number			
BMD.25.0155.DRE.002			



INDICATIVE PLANTING SHEDULE

NATIVE HEDGE MIX – to be planted in double staggered rows @ 400mm centres (5/lin m) planted in single species groups no less than 3, no more than 5

Species	%	Form	Height (cm)	Root
Acer campestre	5	Transplant	60–80	BR
Corylus avellana	10	Transplant	60–80	BR
Crataegus monogyna	60	Transplant	60–80	BR
Prunus spinosa	20	Transplant	60–80	BR
Rosa canina	5	Transplant	60–80	BR

WOODLAND PLANTING MIX

Species	%	Girth (cm)	Height (cm)	Form	Root	Density
TREES						
Acer campestre	5	6–8	250–300	Feathered	RB	Ctr. 3–4m
Carpinus betulus	10	8–10	250–300	Standard	RB	Ctr. 3–4m
Fagus sylvatica	5	8–10	250–300	Standard	RB	Ctr. 3–4m
Malus sylvatica	10	6–8	200–250	Feathered	RB	Ctr. 3–4m
Prunus avium	10	6–8	250–300	Feathered	RB	Ctr. 3–4m
Quercus robur	10	6–8	250–300	Light Standard	RB	Ctr. 3–4m
UNDERSTORY SHRUB						
Cornus sanguinea	10	–	60–80	Transplant	RB	1/m2
Corylus avellana	10	–	80–100	Transplant	RB	1/m2
Crataegus monogyna	10	–	80–100	Transplant	RB	1/m2
Prunus spinosa	10	–	60–80	Transplant	RB	1/m2
Ilex aquifolium	5	–	30–40	Branched	RB	1/m2
Sambucus nigra	5	–	80–100	Transplant	RB	1/m2

Shrub to be planted in single species groups no less than 5, no more than 10

KEY

Site Boundary (7.06ha)

Existing vegetation

Tree/hedge to be removed

Proposed hedge planting
to infill gaps within planting along road B4031

WOODLAND PLANTING

Proposed tree

Woodland edge and understorey (shrub only)

GRASSLAND AREA

Wildflower grassland
e.g EM6 Meadow Mixture for Chalk and Limestone Soil
by Emorsgate or similar approved

Wetland Meadow
e.g EM8 Meadow Mixture for Wetlands
by Emorsgate or similar approved

Wildflower Meadow
e.g EM1 Basic General Purpose Meadow
by Emorsgate or similar approved

Boundary fencing
Post and wire

Perimeter secure site fencing

A. METADATA AND LIMITATIONS

A.1 Metadata

Factor	Detail
Data	Biodiversity Net Gain Calculations
Reason for collection	To provide an audit of the predicted biodiversity net gain score for the Site using the Statutory Biodiversity Metric for the proposed development at Ashton Keynes AD Facility, Wiltshire
Location	Ashton Keynes AD Facility, Wiltshire Approx. Centre: SU 03979 96156
Survey Date	10/07/2025
Method of collection	See Section 2
Assessment completed by	Archie Neale BSc (Hons)
Assessment calculator used	The Statutory Biodiversity Metric (Natural England)
GIS software	ArcGIS Desktop 10.8 & ArcGIS Pro 3.1
AutoCAD software	N/A

A.2 Limitations review

Consideration	Comment
Survey & data	
Personal competence, i.e. qualifications, training, skills, understanding, experience	All assessment works were undertaken by or directly supervised by personnel experienced in biodiversity net gain assessments. <u>Archie Neale BSc (Hons)</u> has over 5 years' experience in ecological consultancy, including an experience of performing and coordinating site based ecological mitigation work, ecological surveys and reporting. <u>Jonathan Wood BSc (Hons) MCIEEM</u> has over 11 years' experience in ecological consultancy, including an experience of performing and coordinating the survey work and assessments undertaken at Site. <u>James Patmore CEcol CEnv MCIEEM</u> James has over 23 years of professional experience of ecological and biodiversity surveys and assessments. This has included developing monitoring mechanisms for a range of habitats, assessing impacts of development on biodiversity, undertaking biodiversity net gain calculations for both small sites and large-scale schemes and writing enhancement and mitigation strategies. Attended a number of training courses/conferences on biodiversity net gain delivered by specialist consultants, Natural England and CIEEM. <u>Mark Parnell MRes BSc</u> GIS mapping and area measurements were drawn and calculated by Mark Parnell. Mark has worked as a GIS specialist for more than 14 years, including work for DEFRA.
Resources (equipment and/or personnel)	Appropriate resources and suitably qualified personnel were used.
Time spent surveying	NA
Data (e.g. arising from incomplete or inappropriate surveys)	The data collected was sufficient for the purpose of the works.
Lack of statistical robustness and higher uncertainties	Appropriate statistical analysis of data was applied during this assessment. All uncertainties have been fully acknowledged and duly taken into consideration.
Old and out of date data	All data used is up to date from 2025.
Timing or seasonal constraints and suboptimal survey periods	N/A
Partial use of and/or departures from good practice guidelines	All assessments accorded with the relevant best practice guidelines.
Site conditions & other factors	
Adverse weather conditions	N/A
Restricted access to site or part of site	N/A
Unrealistic deadlines	No restrictions on survey data collected or analysed to date are as a result of unrealistic deadlines.
Unproven or untested measures for mitigation and compensation	N/A
Evaluation of conservation value and impacts	The evaluation of the conservation value of habitats within the Site and impacts of the development, are based on the most appropriate baseline information available.

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