Tyrer Ecological Consultants Ltd
Specialist in Protected Species

Bringing Together Over 30 Years of
Ecological Excellence

Tyrer Ecological Consultants Ltd, Roselands, Suite 1, 3, Cross Green, Formby, L37 4BH

Biodiversity Net-gain Assessment

January 2025

Project Reference: PR-0408-24

Morton House Farm
Birdy Brow
Clitheroe
BB7 9QY

National Grid Reference: SD 68804 40270

Document Title	Biodiversity Net-gain Assessment
Issue no.	1.0
Project no.	PR-0408-24
Prepared for	P Wilson & Company
Prepared by	Tyrer Ecological Consultants Ltd

BNG Assessor	Miss. J. Collins
Reviewed by	Mr. D. Burrows Qualifying CIEEM
Review date	10/01/2024
Approved by	Mrs. K. Wilding CEnv MIEMA ACIEEM
Date of Issue	13/01/2025

Terms of use:

This report has been prepared by Tyrer Ecological Consultants Ltd with all reasonable skill, care and diligence within the terms of the instruction and permissions granted by the client. The results, conclusions and recommendations of this report are proportionate and in line with the British Standard 42020:2013.

Tyrer Ecological Consultants Ltd have produced this report with all due integrity and adhere to the CIEEM Professional Code of Conduct, with the aim of upholding these objectives and the reputation of the profession.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client.

This report and contents therein are to be used only in conjunction with the Planning Application for which the report has been produced. It must not be used for any other purpose, copied, re-produced or sent to any other party other than the Local Planning Authority Department without the express permission of Tyrer Ecological Consultants Ltd. Furthermore. the data contained herein must not be copied, re-produced or sent to any other party/organisation whatsoever without the express permission of Tyrer Ecological Consultants Ltd.

Tyrer Ecological Consultants Ltd will however consider forwarding data that is collected as part of its reports to the relevant wildlife records centre.

Executive Summary

As part of an ongoing planning application with Ribble Valley Borough Council (Ref No: **3/2024/0867**) at Morton House Farm, Clitheroe, Tyrer Ecological Consultants Ltd were commissioned to carry out a Biodiversity Net-gain (BNG) Assessment by P Wilson & Company. This process follows on from an initial site visit in December 2024, which identified, mapped and condition assessed the habitats present within the red line boundary.

Proposals entail the change of use of land for the construction of a domestic equestrian riding arena incorporating pathways for the applicant and their horses; associated landscaping (hedge planting) to provide additional screening. There is an additional red-line boundary within the wider ownership for an area to the south set aside for habitat enhancement.

Based on the combination of on-site and off-site results, the scheme will result in a 16.50**% net gain** in **Habitat Units** and **605.33% net gain** in **Hedgerow Units**. In terms of specific unit changes, the metric output indicates a gain of **0.16 Habitat Units** and **0.39 Hedgerow Units**. The **trading rules are satisfied** for the site.

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.16
	Hedgerow units	0.39
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	16.50%
	Hedgerow units	605.33%
	Watercourse units	N/A
Trading rules satisfied?	Yes	

The above results are based on extensive cooperation between the Ecologist (Tyrer Ecological Consultants) and the applicant / agent (P Wilson & Company), which has resulted in changes to the landscaping scheme with biodiversity in mind, indicating that the scheme has been produced in line with the mitigation hierarchy and BNG guidance. If proposals are altered, then it may be necessary to re-assess the scheme using the Statutory Biodiversity Metric Tool in order to ascertain whether a gain is still achieved.

The native hedgerow and other neutral grassland creation are considered significant, as the native hedgerows are considered strategically significant under the Ribble Valley BAP and UKBAP, and the other neutral grassland is a ‘medium distinctiveness’ habitat and included in the RVBAP, as such these created habitats will require a Habitat Monitoring and Management Plan (HMMP), detailing management prescriptions for the 30 year period.

Table of Contents

1.0 Introduction & Scope

2.0 The Statutory Biodiversity Metric Calculation Tool

3.0 Limitations

4.0 Habitat Survey with Metric

5.0 Conclusions & Recommendations

6.0 Bibliography

Appendix I: Condition Assessment Tables

Appendix II: On-site baseline UK Habitats Map

Appendix III: On-site post-development UK Habitats Map

Appendix IIII: Off-site baseline UK Habitats Map

Appendix V: Off-site post-development UK Habitats Map

External Appendices

- *Morton House Farm - Preliminary Ecological Appraisal* (Tyrer Ecological Consultants Ltd, January 2025)
- *PR-0408-24 Morton House Farm - The Statutory Biodiversity Metric Calculation Tool* (Tyrer Ecological Consultants Ltd, January 2025)

1.0 Introduction & Scope

1.1 As part of an ongoing planning application with Ribble Valley Borough Council (Ref No: **3/2024/0867**) at Morton House Farm, Clitheroe, Tyrer Ecological Consultants Ltd were commissioned to carry out a Biodiversity Net-gain (BNG) Assessment by P Wilson & Company. This process follows on from an initial site visit in December 2024, which identified, mapped and condition assessed the habitats present within the red line boundary.

1.2 Proposals entail the change of use of land for the construction of a domestic equestrian riding arena incorporating pathways for the applicant and their horses; associated landscaping (hedge planting) to provide additional screening. There is an additional red-line boundary within the wider ownership for an area to the south set aside for habitat enhancement. See **Figure 1.1** for a proposed site plan.

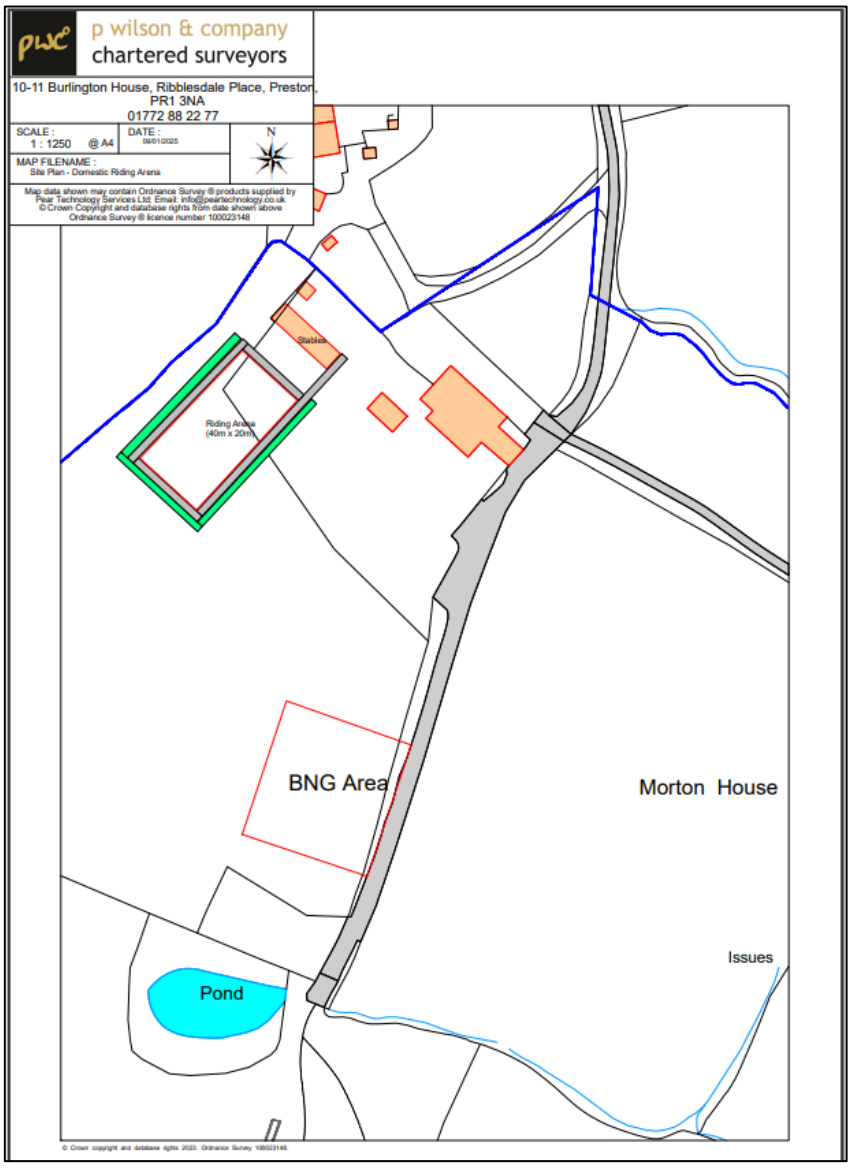

Figure 1.1 – *Proposed site plan (© P Wilson & Company)*

1.3 This BNG Assessment relies on third-party information gathered during the baseline assessment as well as from plans associated with the scheme (see **Point 2.7** of this report for key third-party data sources).

1.4 As part of the Local Planning Authorities (LPA) planning policies and obligations to the Planning Framework, ecological surveys are generally required prior to planning permission

being granted, particularly where protected / priority habitats or species are, or may be present, that could be affected by the proposals for which the application seeks consent.

1.5 This assessment uses 'The Statutory Biodiversity Metric Tool' as this tool is the most appropriate metric for the proposed scheme versus alternatives available. This metric can be used or specified by any development project, consenting body or landowner that needs to calculate biodiversity losses and gains for terrestrial and / or intertidal habitats and has been extensively tested.

Policy & Good Practice for BNG

1.6 The National Planning Policy Framework (NPPF), revised in December 2024, legislates net gain in biodiversity through paragraphs 8(c), 187(d), 192(b) and 193(d). An effort should be made, therefore, through the development design to provide ecological enhancement in order to deliver an overall increase in biodiversity, and opportunities to incorporate biodiversity in and around developments should be encouraged.

1.7 The Environment Act 2021 ('The Act') came into force in November 2021. Aspects of the Act relating to BNG came into force on the 12th February 2024, whereby BNG is mandatory under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021).

1.8 The Act is supported by secondary legislation, consisting of six statutory instruments laid within law, of which the relevant legislation includes:

- The Environment Act 2021 (Commencement No. 8 and Transitional Provisions) Regulations 2024[1]
- The Biodiversity Gain Site Register Regulations 2024[2]
- The Biodiversity Gain Site Register (Financial Penalties and Fees) Regulations 2024[3]
- The Biodiversity Gain Requirements (Exemptions) Regulations 2024[4]
- The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024[5]
- The Biodiversity Gain (Town and Country Planning) (Modifications and Amendments) (England) Regulations 2024 [6]

1.9 Other legislature considered for the purposes of this report includes the following:

- Biodiversity Net Gain: Good practice principles for development (2019),
- Natural Environment and Rural Communities (NERC) Act (2006) Section 41.

Local Policy

1.10 This national policy mandating Biodiversity Net Gain is reflected in the Ribble Valley Borough Core Strategy 2008 – 2028 with Policy EN4 titled 'Biodiversity and Geodiversity' stating:

"Negative impacts on biodiversity through development proposals should be avoided. Development proposals that adversely affect a site of recognised environmental or ecological importance will only be permitted where a developer can demonstrate that the negative effects of a proposed development can be mitigated, or as a last resort,

[1] https://www.legislation.gov.uk/uksi/2024/44/contents/made
[2] https://www.legislation.gov.uk/uksi/2024/45/contents/made
[3] https://www.legislation.gov.uk/uksi/2024/45/contents/made
[4] https://www.legislation.gov.uk/uksi/2024/47/contents/made
[5] https://www.legislation.gov.uk/uksi/2024/48/contents/made
[6] https://www.legislation.gov.uk/uksi/2024/50/contents/made

compensated for. It will be the developer's responsibility to identify and agree an acceptable scheme, accompanied by appropriate survey information, before an application is determined. There should, as principle, be a net enhancement of biodiversity."

2.0 The Statutory Biodiversity Metric Tool

2.1 Biodiversity Net Gain is specified as "an approach to development which aims to leave the natural environment in a measurably better state than before". The Statutory Biodiversity Metric Calculation Tool is a quantitative tool used to calculate how development projects impact upon the biodiversity value of a site and allows for the scale of mitigative / compensatory measures to be calculated by a suitably qualified individual.

2.2 Application of use follows the Biodiversity Net Gain Principles and Rules (DEFRA, February 2024) covered in the most recent User Guide[7] (see **Tables 2.1 – 2.2**), whilst also taking into account the Biodiversity Net Gain: Good practice principles[8], developed by **CIRIA** (Construction Industry Research and Information Association), **CIEEM** (Chartered Institute of Ecology and Environmental Management) and **IEMA** (Institute of Environmental Management and Assessment).

2.3 It is a legal requirement that the four BNG Rules are met, whilst the Principles provide guidance for application of use.

Table 2.1 – Biodiversity Metric Rules

Rule Number	Rule Detail
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 applied to each unit type.
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 used 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 circumstances, deviation from this biodiversity metric methodology may be permitted by the relevant planning authority.

[7] See: https://assets.publishing.service.gov.uk/media/65c60e0514b83c000ca715f3/The_Statutory_Biodiversity_Metric_-_User_Guide_.pdf
[8] See: https://cieem.net/wp-content/uploads/2019/02/Biodiversity-Net-Gain-Principles.pdf

Table 2.2 – Biodiversity Metric Principles

Principle Number	Principle Detail
1	The metric assessment should be completed by a competent person.
2	The use of the biodiversity metric does not override existing biodiversity protections, statutory obligations, policy requirements, ecological mitigation hierarchy or any other requirement. This includes consenting or licencing processes, for example woodlands.
3	The biodiversity metric should be used in accordance with established good practice guidelines and professional codes.
4	The 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 seek, where practical and reasonable, to be 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

2.3 Using the available baseline ecological information gathered and supported by the design information as has been communicated, the Statutory Biodiversity Metric Tool was completed by the following assessor (see **Table 2.3** overleaf):

Table 2.3 – BNG Assessor credentials

Name	Description of most relevant credentials
Miss. J. Collins	• A Junior Ecologist with a range of training and experience; holds a BSc in Wildlife Conservation and MSc in Drone Applications and Wildlife Conservation • Received in-house training from Senior Ecologists as well as attended both external webinars and training courses in applying the Metric, • Undertaken a number of BNG assessments, utilising the Statutory Metric Tool. • Accredited agent on the Natural England Class 2 bat license of Mrs K Wilding CEnv MIEMA ACIEEM (CLS-14227),

2.4 Assessment of baseline/post-development Area/ Hedge/ River units have been carried out and assessed separately in accordance with the guidance, principles, and rules – where present on site. Any revisions required following the issue of this report will use The Statutory Biodiversity Metric in accordance with the rules of use for that version.

2.5 Measurement of habitats was carried out using a combination of desktop software – QGIS, Google Earth and MAGiC maps 2023/24, whilst physical habitat measurements were also taken in the field during ground truthing, where necessary.

2.6 Strategic significance has been justified from a combination of the Ribble Valley Borough Council Core Strategy, South Ribble Biodiversity Action Plan, as well as use of the Nature Recovery Interactive Map[9] available on the Lancashire County Council MARIO website, which shows the site as lying within the Forest of Bowland Area of Natural Beauty therefore onsite habitats are considered to be formally identified in the local strategy.

2.7 Key third-party data sources and / or information used to inform this BNG assessment include:

- **Proposed site plan** – *241016 site plan,* P Wilson & Company (October 2024)
- **241016 Planning Statement,** P Wilson & Company
- **Site Plan BNG,** P Wilson & Company (January 2025)

2.8 The results, conclusions and recommendations of this report have been assessed by Mrs. K. Wilding, Director of Tyrer Ecological Consultants Ltd, and her assessment concurs with the findings and recommendations of Miss Collins, as well as with other Senior consultants within the company.

[9] https://experience.arcgis.com/experience/d429aa6435b849838af1d2cef68de43b/

3.0 Limitations

3.1 Third-party information was utilised in the completion of the Biodiversity Net-gain assessment (see **Section 2.7**), therefore Tyrer Ecological Consultants Ltd cannot be held accountable for any possible discrepancies within supporting information.

3.2 The habitat codes of UK Habitats are not, at present, fully aligned with the Biodiversity Metric Calculator. Translations have, therefore, been made between the two categorisations by the assessor, who aims to most accurately represent the biodiversity value of the site and the habitats present.

3.3 Measurements have been calculated utilising software such as 'QGIS' (a Geographic Information System or GIS), aerial imagery and third-party plans provided by the applicant, all of which may have varying levels of inaccuracy, and as such Tyrer Ecological Consultants Ltd cannot be held accountable for any discrepancies between habitat areas (ha) or linear features (km) stated in this report and other documentation pertaining to the site.

3.4 The Statutory Biodiversity Metric allows for an area / length accuracy to any number of decimal places, however 'Total area'/ 'Total length' is displayed to two decimal places, this may result in small rounding discrepancies on large sites with many small parcels of habitat. However, the metric uses the true value entered into each row to calculate the overall unit change of the site, thus while rounding discrepancies may be displayed under 'Total area'/ 'Total length' these discrepancies do not impact the results of the calculation tool; These discrepancies should be taken into account by both the practitioner and reviewer in line with the above.

3.5 In considering possible limitations, no significant constraints were experienced which might adversely influence the results, conclusions, and recommendations of this BNG assessment, the results of which have been presented in accordance with the rules and principles of use to the satisfaction of the assessor.

4.0 Habitat Survey with Metric

On-site Information

4.1 The reader is referred to the 'Hard copy' of the Metric[10], which will accompany this report when issued and should be read in conjunction with this section. See **Table 4.1 and Table 4.2** below for **baseline on-site habitat and linear information** as extracted from the Hard copy of the Metric. **Table 4.3 and Table 4.4** display **post-development on-site habitat and linear information** based on the proposals provided to the author.

4.2 Please refer to **Appendix I** for specific scoring of the condition analyses carried out at the site on a per-habitat basis.

4.3 Proposals include the change of use of land for the construction of a domestic equestrian riding arena incorporating pathways for the applicant and their horses; associated landscaping (hedge planting) to provide additional screening. There is an additional red-line boundary within the wider ownership for an area to the south set aside for habitat enhancement.

4.4 The current proposals result in the loss of the **g4** and **h2a6** habitats present on site, see **Figures 4.1** – **4.2** overleaf for UK Habitats maps of the on-site habitats at the baseline and post-development stage.

Table 4.1 – Baseline Habitat information for Area habitats

Habitat Type	Area (hectares)	Condition	Assessor comments	Habitat Units
g4 Modified grassland	0.1413	Poor	The entirety of the area within the development red line boundary is comprised of modified grassland, which is currently being actively managed, evident from the very short sward height. The component species are typical of enriched substrate and is dominated by graminoid species including perennial rye-grass (*Lolium perenne*), and cock's-foot (*Dactylis glomerata*) as well as other graminoid and herb species such as common bent (*Agrostis capillaris*), Yorkshire fog (*Holcus lanatus*), creeping buttercup (*Ranunculus repens*), small nettle (*Urtica urens*) and broad leaved dock (*Rumex obtusifolius*).	**0.28**
u1f Sparsely vegetated land	0.1380	Moderate	An area of sparsely vegetated land located within the wider ownership of the client outside of the red line boundary, to be used as an area of enhancement in line with BNG. The vegetation is comprised of ruderal / ephemeral species such as common bent, pineapple weed (*Matricaria discoidea*), chickweed (*Stellaria sp.*) and toad rush (*Juncus bufonius*).	**0.55**

[10] *This section of the report should be read in conjunction with the hard copy of the Statutory Biodiversity Metric tool – external Appendix.*

Total Habitat area (excl. urban trees	**0.28**		**Total Habitat Units (incl. urban trees)**	**0.83**

Table 4.2 – Baseline Hedgerow information for Linear habitats

Habitat Type	Length (kilometres)	Condition	Assessor comments	Hedgerow Units
h2a6 – Other native hedgerow (***Metric:*** *'Native hedgerow'*)	0.014	Moderate	A newly planted hedgerow consisting entirely of holly (*Ilex aquifolium*), which partially runs through the red line boundary.	**0.06**
Total Hedgerow Length	**0.014**		**Total Hedgerow Units**	**0.06**

Table 4.3 – Post-development On-site Habitat information for Area habitats

Habitat Type	Area (hectares)	Condition	Assessor comments	Habitat Units
g3c – Other neutral grassland	0.1380	Moderate	An area of neutral grassland that will be created using a species-rich native wildflower seed mix, such as a 'neutral grassland' meadow mix[11] and which will be fenced off to ensure correct management practices and to aim to achieve moderate condition.	**1.06**
g4 – Modified grassland	0.0251	Poor	An area of grassland where the new hedgerows will be planted that will lead into the surrounding site.	**0.05**
u1b6 – Other developed land (***Metric****: 'Developed land, sealed surface*)	0.0850	N/A	The main area of the equestrian riding arena that will be constructed from recycled rubber and silica sand.	**0.00**
u1c – Artificial unvegetated, unsealed surface	0.0310	N/A	Gravel pathways with a wooden border that will form the pathway from the stable block to the riding arena.	**0.00**

[11] https://www.habitataid.co.uk/collections/wildflower-seed-meadow-mixes-others

Total Habitat area (excl. urban trees)	**0.28**		**Total Habitat Units (incl. urban trees)**	**1.11**

Table 4.4 – Post-development On-site information for Linear features

Habitat Type	Length (kilometres)	Condition	Assessor comments	Hedgerow Units
h2a6 – Other native hedgerow (***Metric:*** *'Native hedgerow'*)	0.014	Moderate	A hedgerow consisting entirely of holly (*Ilex aquifolium*), that will be removed and replanted from the baseline habitat.	**0.05**
h2a6 – Other native hedgerow (***Metric:*** *'Native hedgerow'*)	0.104	Moderate	A newly planted hedgerow to provide screening for the riding arena that will include a mixture of nature species including hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*) and dog rose (*Rosa canina* **agg.**).	**0.40**
Total Hedgerow Length	**0.12**		**Total Hedgerow Units**	**0.45**

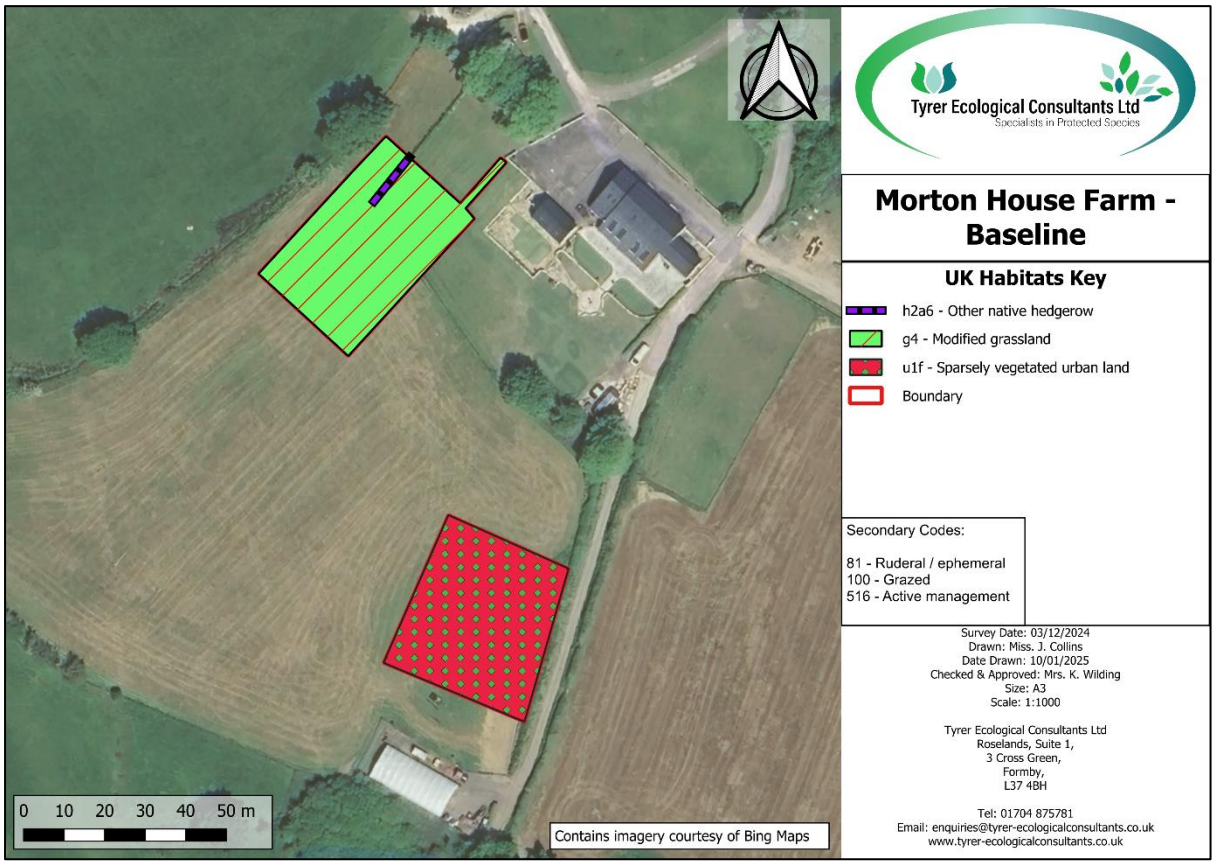

Figure 4.1 – *Baseline On-site UK Habitats Map*

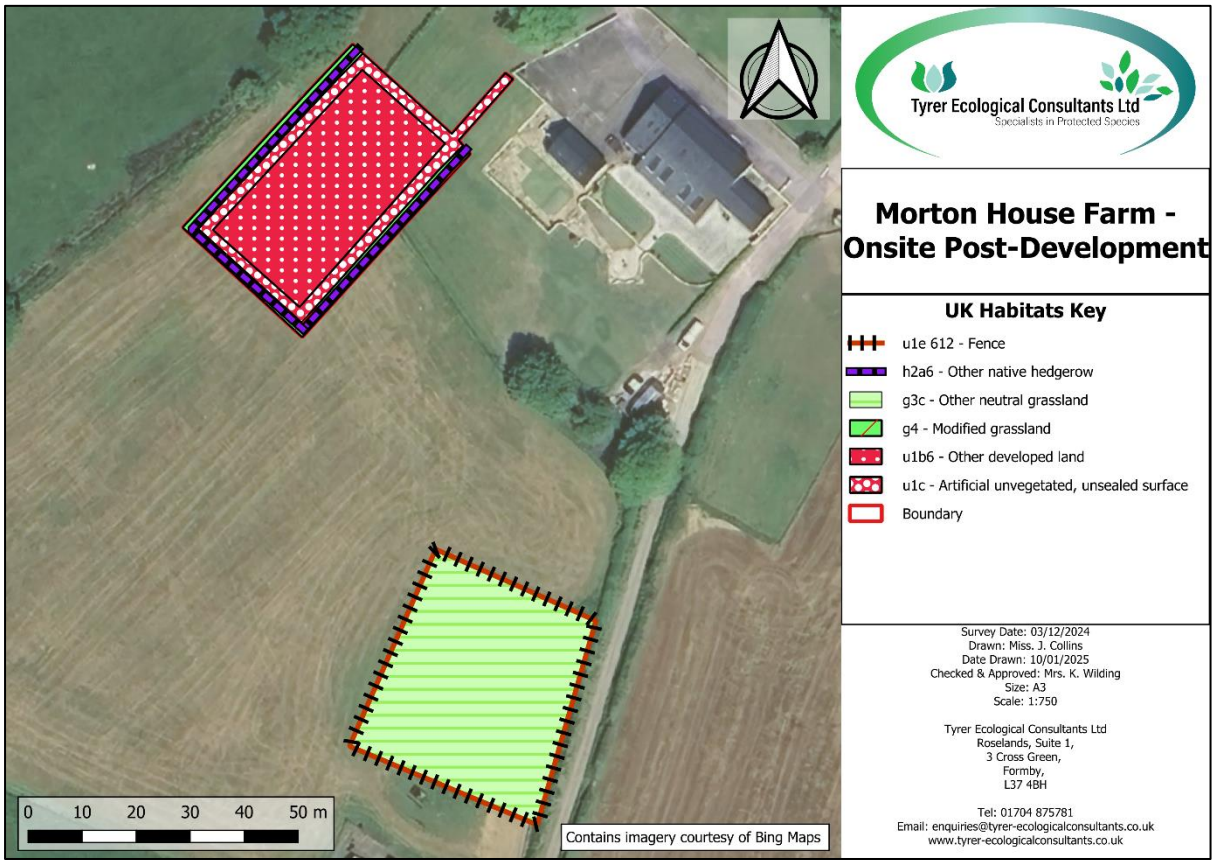

Figure 4.2 – *Post-development On-site UK Habitats Map*

5.0 Conclusions & Recommendations

5.1 Based on the combination of on-site and off-site results, the scheme will result in a **33.10% net gain** in **Habitat Units** and **605.33% net gain** in **Hedgerow Units**.

5.2 In terms of specific unit changes, the metric output indicates a gain of **0.16 Habitat Units** and **0.39 Hedgerow Units**.

5.3 The **trading rules are satisfied** for the site.

5.4 See **Figure 5.1** below for Headline results summary of projections as outputted by the Statutory Biodiversity Net-gain Metric tool.

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.16
	Hedgerow units	0.39
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	16.50%
	Hedgerow units	605.33%
	Watercourse units	N/A
Trading rules satisfied?	Yes	

Figure 5.1 – *Headline results summary of projections outputted by the Statutory Biodiversity Metric Tool*

5.5 The above results are based on extensive cooperation between the Ecologist (Tyrer Ecological Consultants) and the applicant / agent (P Wilson & Company), which has resulted in changes to the landscaping scheme with biodiversity in mind, indicating that the scheme has been produced in line with the mitigation hierarchy and BNG guidance. If proposals are altered, then it may be necessary to re-assess the scheme using the Statutory Biodiversity Metric Tool in order to ascertain whether a gain is still achieved.

5.6 The native hedgerow and other neutral grassland habitat creation are considered significant, as the native hedgerow has a high strategic significance as a Ribble Valley BAP and UKBAP habitat, and the other neutral grassland is a 'medium distinctiveness' habitat and included in the RVBAP, as such these created habitats will require a Habitat Monitoring and Management Plan (HMMP), detailing management prescriptions for the 30-year period.

6.0 Bibliography

- **CIEEM**, 2019. *Biodiversity Net Gain: Good practice principles for development*. Available from: www.cieem.net/data/files/Publications/Biodiversity_Net_Gain_Principles.pdf

- **CIEEM**, 2016. *Guidelines for Ecological Impact Assessment in the UK and Ireland*, 2nd edition. Available from: www.cieem.net/data/files/Publications/EcIA_Guidelines_Terrestrial_Freshwater_and_Coastal_Jan_2016.pdf

- **CIEEM**, 2016. UK Guidelines for Accessing and Using Biodiversity Data. Available from: www.cieem.net/data/files/Publications/Guidelines_for_Accessing_and_Using_Biodiversity_Data.pdf

- **CIEEM**, 2017. *Guidelines for Preliminary Ecological Appraisal*, 2nd edition. Available from: www.cieem.net/data/files/Publications/Guidelines_for_Preliminary_Ecological_Appraisal_Jan2018_1.pdf

- **Communities & Local Government (C&LG)**, 2019. *National Planning Policy Framework*. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

- **DEFRA**, 2018. *Net gain: Consultation Proposals*. Available from: https://consult.defra.gov.uk/land-use/net-gain/supporting_documents/netgainconsultationdocument.pdf

- **Defra. 2024.** *The Statutory Biodiversity Metric Tool (*February 2024*).* Available from**: https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides**

- **Global Biodiversity Information Facility (GBIF)**, 2019. Available from: https://www.gbif.org/

- **Google Earth Pro**, 2023. Available for download from: https://www.google.com/earth/download/gep/agree.html?hl=en-GB

- **Merseyside Environmental Advisory Service**, 2022. *Information Note on Biodiversity Net Gain and its implementation in the Liverpool City Region*. Available online.

- **Joint Nature Conservancy Council (JNCC)**, 2010. *Handbook for Phase 1 habitat survey.* Available from: http://jncc.defra.gov.uk/PDF/pub10_handbookforphase1habitatsurvey.pdf

- **Magic Maps Application**, 2023. Available from: www.natureonthemap.naturalengland.org.uk/MagicMap.aspx

Appendix I: Condition Assessment Tables

Baseline Condition Assessment Score – Modified Grassland (Low)

Condition Assessment Criteria		Criterion passed (Y/N)
A	There are 6-8 vascular plant species per m^2 present, including at least 2 forbs. **Note - this criterion is essential for achieving Moderate or Good condition.** Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m^2, please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	**N**
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	**N**
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	**Y**
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	**Y**
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	**Y**
F	Cover of bracken *Pteridium aquilinum* is less than 20%.	**Y**
G	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).	**Y**
	Total Score	**5**

Condition Assessment Result	Condition Assessment Score	
Passes 6 or 7 criteria including passing essential criterion A	Good	
Passes 4 or 5 criteria including passing essential criterion A	Moderate	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor	**Y**

Baseline Condition Assessment Score – Hedgerow

Attributes and functional groupings (A, B, C, D & E)		Criteria	Description	Condition Achieved
A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is > 1.5 m height).	**Y**
A2.	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn *Prunus spinosa* suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	**N**
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	**Y**
B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length and No canopy gaps >5 m	This is the horizontal gappiness of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall gappiness but are not subject to the >5 m criterion (as this is the typical size of a gate).	**N**

C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: - measured from outer edge of hedgerow, and - is present on one side of the hedge (at least)	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	**Y**
C2.	Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground	The indicator species used are nettles Urtica spp., cleavers Galium aparine and docks Rumex spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	**Y**
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website4, as well as the BSBI website where the 'Online Atlas of the British and Irish Flora' contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website.	**Y**
D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).	**Y**
			Number of Criteria failed	**2**
			Number of Functional Groups failed	**0**

Condition Assessment Result	**Condition Assessment Score**
No more than 2 failures in total; AND No more than 1 failure in any functional group.	Good
No more than 5 failures in total; AND Does not fail both attributes in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	Moderate
Fails a total of more than 5 attributes; OR Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	Poor

Baseline Condition Assessment Score – Sparsely vegetated land

Condition Assessment Criteria		***Criterion passed (Yes or No)***
A	The parcel represents a good example of its specific sparsely vegetated habitat type - the appearance and composition of the vegetation closely matches its UKHab description, with characteristic indicator species consistently present.[1]	**N**
B	The cover of bracken Pteridium aquilinum, scrub and trees is less than 25%.	**Y**
C	There is an absence of invasive non-native plant species[2] (as listed on Schedule 9 of WCA[3]) and species indicative of suboptimal condition[4] make up less than 5% of vegetated ground cover.	**Y**
D	Vegetation cover of vascular and non-vascular plants is between 5 and 50%.	**Y**
Number of criteria passed		
Condition Assessment Result (out of 4 criteria)	***Condition Assessment Score***	***Score Achieved ×/✓***
Passes 4 criteria	Good (3)	
Passes 3 criteria	Moderate (2)	**Y**
Passes 2 or fewer criteria	Poor (1)	

Post-development Condition Assessment Score – Other neutral grassland

Condition Assessment Criteria		Criterion passed (Yes or No)
A	The grassland is a good representation of the habitat type it has been identified as, based on its UKHab description - the appearance and composition of the vegetation closely matches the characteristics of the specific grassland habitat type. Indicator species listed by UKHab for the specific grassland habitat type are consistently present. **Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.**	**Y**
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	**Y**
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens[1].	**N**
D	Cover of bracken *Pteridium aquilinum* is less than 20% and cover of scrub (including bramble *Rubus fruticosus* agg.) is less than 5%.	**Y**
E	Combined cover of species indicative of sub-optimal condition and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species (as listed on Schedule 9 of WCA) are present, this criterion is automatically failed.	**Y**
Additional Criterion - must be assessed for all non-acid grassland types		
F	There are 10 or more vascular plant species per m^2 present, including forbs that are characteristic of the habitat type. **Note - this criterion is essential for achieving Good condition for non-acid grassland types only.**	**N**
	Total Score	**4**

Condition Assessment Result	Condition Assessment Score
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good
Passes 3 - 5 criteria, including essential criterion A.	Moderate
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor

Post-development Condition Assessment Score – Hedgerow

Attributes and functional groupings (A, B, C, D & E)		Criteria	Description	Condition Achieved
A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is > 1.5 m height).	**N**
A2.	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn *Prunus spinosa* suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	**N**
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	**Y**
B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length and No canopy gaps >5 m	This is the horizontal gappiness of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall gappiness but are not subject to the >5 m criterion (as this is the typical size of a gate).	**Y**

C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: - measured from outer edge of hedgerow, and - is present on one side of the hedge (at least)	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	**Y**
C2.	Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground	The indicator species used are nettles Urtica spp., cleavers Galium aparine and docks Rumex spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	**Y**
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website4, as well as the BSBI website where the 'Online Atlas of the British and Irish Flora' contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website.	**Y**
D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).	**Y**
			Number of Criteria failed	**2**
			Number of Functional Groups failed	**1**

Condition Assessment Result	**Condition Assessment Score**
No more than 2 failures in total; AND No more than 1 failure in any functional group.	Good
No more than 5 failures in total; AND Does not fail both attributes in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	Moderate
Fails a total of more than 5 attributes; OR Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	Poor

Appendix II: On-site baseline – UK Habitats Map

Tyrer Ecological Consultants Ltd
Specialists in Protected Species

Morton House Farm - Baseline

UK Habitats Key

- h2a6 - Other native hedgerow
- g4 - Modified grassland
- u1f - Sparsely vegetated urban land
- Boundary

Secondary Codes:

81 - Ruderal / ephemeral
100 - Grazed
516 - Active management

Survey Date: 03/12/2024
Drawn: Miss. J. Collins
Date Drawn: 10/01/2025
Checked & Approved: Mrs. K. Wilding
Size: A3
Scale: 1:1000

Tyrer Ecological Consultants Ltd
Roselands, Suite 1,
3 Cross Green,
Formby,
L37 4BH

Tel: 01704 875781
Email: enquiries@tyrer-ecologicalconsultants.co.uk
www.tyrer-ecologicalconsultants.co.uk

Appendix III: On-site post-development – UK Habitats Map

Tyrer Ecological Consultants Ltd
Specialists in Protected Species

Morton House Farm - Onsite Post-Development

UK Habitats Key

- u1e 612 - Fence
- h2a6 - Other native hedgerow
- g3c - Other neutral grassland
- g4 - Modified grassland
- u1b6 - Other developed land
- u1c - Artificial unvegetated, unsealed surface
- Boundary

Survey Date: 03/12/2024
Drawn: Miss. J. Collins
Date Drawn: 10/01/2025
Checked & Approved: Mrs. K. Wilding
Size: A3
Scale: 1:750

Tyrer Ecological Consultants Ltd
Roselands, Suite 1,
3 Cross Green,
Formby,
L37 4BH

Tel: 01704 875781
Email: enquiries@tyrer-ecologicalconsultants.co.uk
www.tyrer-ecologicalconsultants.co.uk