

GEOSPHERE ENVIRONMENTAL

BIODIVERSITY NET GAIN FEASIBILITY REPORT

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SITE: Sheringham Recycling Centre, Holt Road, East Beckham, Sheringham, NR26 8TW

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V1	01/12/22	Original Document	EB	CJ
V2	20/01/23	New Site Plan	RF	CJ

Executive Summary

Report description	<p>This biodiversity net gain assessment report has been prepared by Geosphere Environmental Limited for Stantec UK Ltd and relates to the proposed commercial development of the site at Sheringham Recycling Centre, Holt Road, East Beckham, Sheringham, NR26 8TW.</p> <p>The purpose of this report is to carry out a biodiversity net gain assessment and provide options for on-site and off-site compensation where necessary.</p>
Outcome of BNG Assessment	<p>When assessing the site as shown on the Proposed Development Plan, drawing ref. 49868/2001/101 Rev P05, the site does not achieve 'no net loss of biodiversity' or a 10% biodiversity net gain.</p> <p>An additional area shown on The Sheringham New Access to Recycling Centre General Arrangement Plan, Drawing ref. PQ3038-HP4-0100-001 Rev P01, shows that the old road can be removed, and replanted. This area that could potentially be used to provide an area of scrub planting, that would satisfy the need for 'no net loss of biodiversity', and would provide a biodiversity net gain of +23.88%.</p>
Recommendations	<p>The habitats proposed within the scheme need to be of a sufficient quality to achieve the conditions as assessed within these calculations. Specifications for the creation and management of these features are summarised within this report.</p> <p>A full Landscape and Ecological Management Plan should be produced to provide detail of the creation and management of the habitats. It is considered that this should be requested by the Local Planning Authority as an appropriately worded planning condition. The landscape and ecological management plan would need to include the area of scrub planting on the old road.</p> <p>Final calculations of biodiversity units should be provided at the same time as the Landscape and Ecological Management Plan to ensure that the proposals provide a biodiversity net gain.</p>
Conclusions	<p>Provided the recommendations within this report are followed and the mitigation hierarchy of avoidance, mitigation, compensation and enhancement is implemented throughout the detailed design process, potential negative effects from development on important ecological features will be negligible, and a biodiversity net gain will be achieved.</p>

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1. INTRODUCTION

1.1 Purpose

This biodiversity net gain assessment report has been prepared by Geosphere Environmental Limited for Stantec UK Ltd and relates to the proposed commercial development of the site at Sheringham Recycling Centre, Holt Road, East Beckham, Sheringham, NR26 8TW for which planning permission will be sought.

The purpose of this report is to carry out a biodiversity net gain assessment using the biodiversity metric 3.1 (ref. **R.1**) and provide options for on-site and off-site compensation that would secure an overall net gain in biodiversity for the scheme.

Any limitations and conditions pertaining to the report are stated within Appendix 1, with a full list of technical references provided within Appendix 2.

1.2 Site Description

The site occupies an area of approximately 0.5 ha and is located around National Grid Reference TG 16281 41032. The indicative development boundary is shown on Figure 1 below:

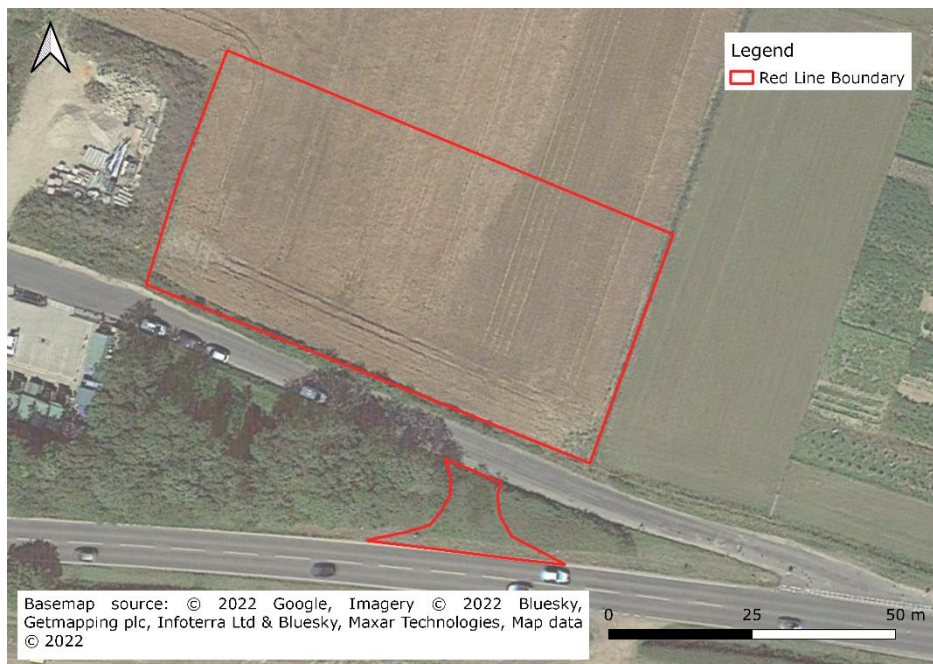


Figure 1. Indicative Site Boundary.

1.3 Proposed Development

The report relates to proposed commercial development of the site as shown in Drawing ref. 49868/2001/101 Rev P05 included within Appendix 3.

2. LEGISLATIVE AND POLICY CONTEXT

2.1 Current UK Legislation

The Environment Act 2021 Act became law on 9 November 2021 and introduces a framework to improve and protect the natural environment, overseen by the newly created Office for Environmental Protection. The Act introduces new statutory requirements, including the duty for local authorities to create new local nature recovery strategies. The Act also introduces a new mandatory requirement for developments to achieve measurable biodiversity net gain. A two-year transition period for this requirement is included in the Act, with provision for secondary legislation to set a date for the requirement to come into force. It is likely this will be late 2023 or later. Once in force, all planning permissions in England (subject to exemptions) must be granted subject to a new general pre-commencement condition that requires approval of a biodiversity gain plan. The planning authority would only approve the biodiversity gain plan if the biodiversity value attributable to a development exceeds the pre-development biodiversity value of the onsite habitat by 10%.

The reader is referred to the original legislation for definitive interpretation.

2.2 Planning Policy

The recommendations of this report are in line with the key principles of the Ministry of Housing, Communities and Local Government (MHCLG) (2021) National Planning Policy Framework (NPPF) (ref. **R.2**) and Government Circular 05/06: Biodiversity and Geological Conservation (ref. **R.3**).

The North Norfolk District Council Local Plan (ref. **R.4**) confirms that developments within North Norfolk will need to achieve Biodiversity Net Gain (BNG). It is unclear what percentage of biodiversity net gain is required during the transition period, but this will be 10% once the transition is ended, therefore this should be targeted. It is likely if a net gain is achievable onsite and this is less than 10%, if an application is made during the transition period, negotiations with the Council may allow this to be agreed.

The document states in Section 3 Delivering Climate Resilient Sustainable Growth:

3.10.7 *An assessment of the existing biodiversity value of the onsite habitat of the development site (the pre-development value) will be required at the point that planning permission is applied for. In order to establish the pre-development value, consideration will be given to whether any deliberate harm to the biodiversity value has taken place in the recent past. Where there is evidence of deliberate neglect and/or damage, or the relevant date has not been subsequently agreed with the Council, the pre-development biodiversity value of the onsite habitat will be taken as that established at January 2020, or as directed in the Act.*

3.10.8 *Applicants will be required to demonstrate how biodiversity net gain can be achieved through the metric, using information taken from habitat surveys of the development site before development and any related habitat clearance or management has taken place, by calculating losses and gains and through*

assessing habitat distinctiveness, condition and extent. To achieve biodiversity net gain, a development must have a sufficiently higher biodiversity unit score after development than before development. When demonstrating biodiversity net gain applicants will be required to clarify the predicted biodiversity outcomes both qualitatively and quantitatively, provide evidence on the application of the mitigation hierarchy, describe the outcomes and how these contribute towards local and strategic biodiversity priorities, demonstrate at least equivalent or better levels of ecological functionality, clarify the timescales for delivery, provide costed management and monitoring plans, identify accountabilities (including enforcement) and responsibilities for delivery of the biodiversity net gain. This will be provided through the submission of a Biodiversity Strategy at validation stage. Any evidence and rationale supplied by applicants should be supported by the appropriate ecological expertise and if appropriate local wildlife knowledge and stakeholders.”

3. METHODOLOGY

3.1 Technical Approach

This report is prepared in accordance with the best practice guidelines set out by CIEEM, CIRIA, IEMA and BSi (refs. **R.5** and **R.6**). The conclusions and recommendations for further works are in accordance with current legislation and guidance.

3.2 Personnel

This report was produced by Eleanor Baker (Graduate Ecologist) BSc (Hons), MSc and was reviewed by Richard Fenna (Principal Ecological & Arboricultural Consultant), BSc (Hons), ACIEEM, ND Arb, TechArborA, Natural England Great Crested Newt Survey Licence level 1 (WML-CL08- licence number 2019-39150-CLS-CLS), Natural England Dormouse survey licence level 1 (WML-CL10a- licence number 2018-35915-CLS-CLS), and approved by Katie Linehan (Technical Director) BSc (Hons) MSc FGS PIEMA MCIEEM, who is experienced in ecological consultancy including the production of detailed ecological impact assessments and habitat enhancement and management strategies.

3.3 Habitat Survey and Condition Assessment

The preliminary ecological appraisal (ref. **R.7**) identified the habitats present onsite. Habitats were assessed in accordance with the UK Habitats Classification (ref. **R.8**) to be used within the DEFRA Metric 3.1.

3.3.1 Habitat Condition Assessment

A condition assessment was carried out in accordance with the methodology outlined in the technical supplement for the DEFRA metric 3.1 (ref. **R.9**) at the same time as the habitat assessment, and the results are included within Appendix 4.

3.4 Biodiversity Net Gain Assessment

3.4.1 Baseline Habitats

Classification of area habitats and linear habitats was carried out in accordance with the methodology outlined in the Biodiversity Metric 3.1 (ref. **R.1**) for input into the Biodiversity Metric 3.1 calculator, based on the UK Habitat Classification descriptions of habitats (ref. **R.8**). A condition assessment of each habitat was carried out using the methodology outlined in the technical supplement for the Biodiversity Metric 3.1 (ref. **R.9**). The results of this and the habitat mapping using the GIS software were input into the Biodiversity Metric 3.1 calculation tool, submitted alongside this report.

3.4.2 Proposed Habitats

The habitats within the proposed development are shown on the drawing ref. 49868/2001/101 Rev P05 included within Appendix 3. The areas of the habitats were calculated by georeferencing this plan and digitising estimated habitats using QGIS software. Habitat categories were assigned to the most rational category based upon The Biodiversity Metric (ref. **R.1**). Future conditions of habitats were assumed based on professional judgement.

Where current deficits in biodiversity units are identified, options to achieve no net loss whilst satisfying trading rules and implementing the mitigation hierarchy are recommended in accordance with the best practice guidance (refs. **R.5** and **R.6**).

4. BIODIVERSITY NET GAIN ASSESSMENT

4.1 Baseline Habitats

The habitats recorded within the survey area include:

- Cereal Crops;
- Bramble Scrub.

Figure 2 below shows the extent of habitats encountered during the site visit.

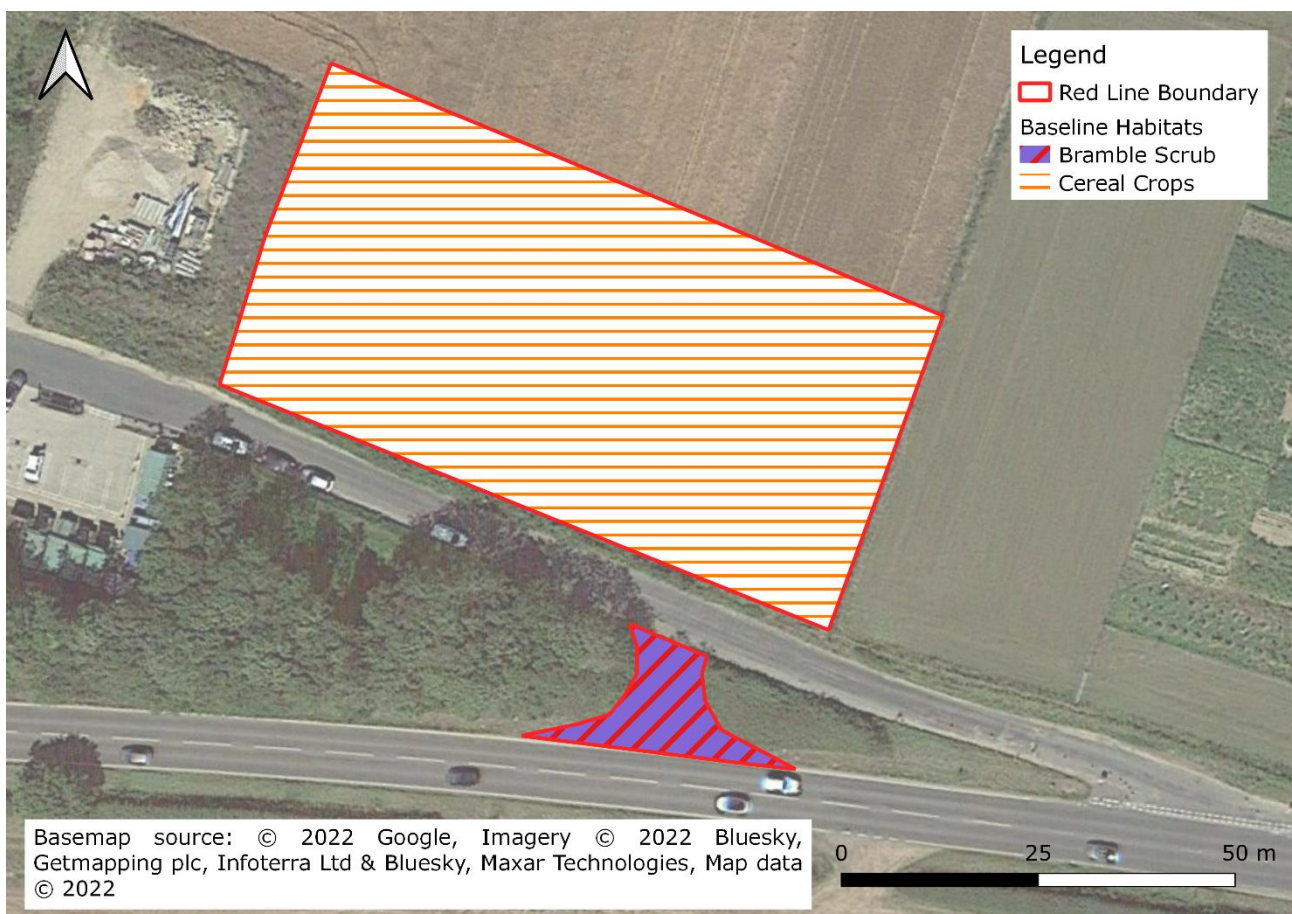


Figure 2. Baseline Onsite Habitats for Biodiversity Net Gain Assessment.

Habitats outside of the site boundary (woodland, and neutral grassland) are not affected by this Net Gain assessment, and therefore are not considered further in this report.

4.1.1 Baseline Ecological Value

A summary of the baseline biodiversity units provided by the habitats are provided in Table 1 below:

Table 1 – Baseline Biodiversity Units

Habitat	Area/Length	Condition	Biodiversity Units
Area-based Habitat	Area (ha)		
Cereal Crops	0.3596	N/A	0.72
Bramble Scrub	0.0196	N/A	0.08
Total Area-based-Habitats	0.38		0.8 (accounting for rounding)

4.2 Proposed Habitats

The habitats within the proposed development are shown on the proposed development plan, Drawing ref. 49868/2001/101 Rev P05, included within Appendix 3. Figure 3 below shows the extent of proposed habitats digitised by geopositioning the proposed development plan and assigning habitats to the most rational category based upon The Biodiversity Metric:

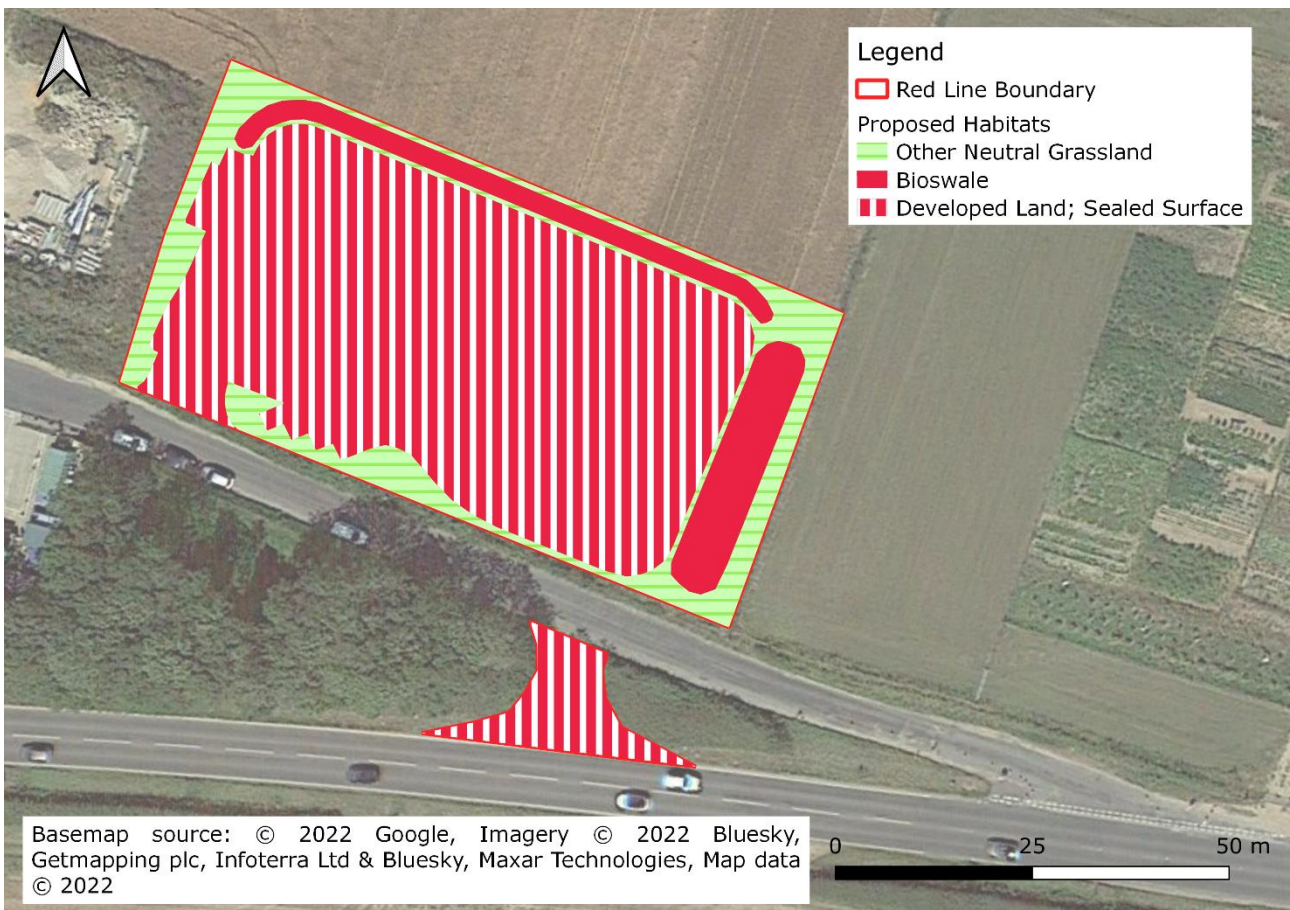


Figure 3. Proposed Onsite Habitats for Biodiversity Net Gain Assessment.

4.2.1 Proposed Ecological Value

The DEFRA metric 3.1 habitats for the proposed development are summarised in Tables 2 below:

Table 2 – Area-based Habitats Within Proposed Development			
Habitat	Area (ha)	Condition	Biodiversity Units
Created area			
Developed Land; Sealed Surface.	0.2803	N/A	0.00
Bioswale.	0.0402	Moderate	0.10
Other Neutral Grassland.	0.0590	Good	0.50
Total created habitat	0.38		0.60

4.3 Biodiversity Net Gain Assessment

The biodiversity metric calculation tool (.xslm spreadsheet) has been submitted alongside this letter report and is available upon request for review as required.

Table 3 below, shows the headline results of the biodiversity net gain assessment:

Table 3 – Onsite Biodiversity Net Gain Assessment Summary of Results		
Onsite baseline.	Habitat units.	0.80
Onsite post-intervention.	Habitat units.	0.60
Onsite total net unit change.	Habitat units.	0.20
Onsite net % change.	Habitat units.	-24.80%
Trading rule issues.	Deficit in habitat units for scrub of medium distinctiveness.	-0.08
	Deficit in habitat units for low distinctiveness habitats.	-0.62

The habitats proposed within the scheme need to be of a sufficient quality to achieve the conditions as assessed within these calculations. Specifications for the creation and management of these features are summarised in section 5.4 below.

4.3.1 Area-based Habitats

The baseline sum of biodiversity units onsite considering area-based habitats is 0.8 habitat units. Post-development in the current scenario, the development would provide 0.6 habitat units, in other words a net loss of 0.20 habitat units (-24.80%).

For the loss of bramble scrub, stricter trading rules apply, since this is a habitat of medium distinctiveness. This means that scrub habitats of medium distinctiveness or higher only can be considered as compensation

for the loss of bramble scrub. For bramble scrub 0.08 units will be lost, and therefore 0.8 units of scrub will need to be created to compensate for the loss.

5. RECOMMENDATIONS

5.1 Recommendations for Appropriate Compensation

Any habitat the developer creates with the purpose of achieving either no net loss of biodiversity or a biodiversity net gain, should be managed for a period of not less than 30 years. A management plan and proof of funding should be provided to the local authority for approval.

5.2 Achieving No Net Loss of Biodiversity

The mitigation hierarchy of avoidance, mitigation and compensation must be satisfied before a no net loss of biodiversity can be realised. This includes implementation of any mitigation measures required to ensure there are no significant effects on ecological receptors. Once these key requirements are met, biodiversity net gain can then be considered.

The potential effects identified in the preliminary ecological appraisal report (ref. **R.7**) that may require mitigation include potential effects on foraging bats and nesting birds in on-site trees and scrub. Recommendations provided in the report include:

- Retention and protection of the trees with roost potential. This should include an appropriate buffer to avoid impacts from vibration and noise during construction;
- A sensitive lighting scheme should be designed in coordination between a qualified lighting engineer and a suitably qualified Ecologist. This should ensure that potential roosting and connective commuting habitat (either retained or created within the development) remains as unlit as possible to allow continued and future use by bats.
- Scrub and tree clearance, if necessary, should be undertaken outside of the bird nesting season. If this is not possible, clearance works should take place with a suitably qualified ecologist present.
- Vegetation clearance should be undertaken under an Ecological Method Statement, to limit the death or injury of reptiles.
- Vegetation clearance should occur in hedgehog active season, to reduce the impact on hedgehogs.

Once a mitigation strategy is agreed, suitable compensation can be considered.

5.2.1 No Net Loss of Bramble Scrub

For the area-based habitats onsite, it is possible to compensate for the loss of habitat units attributable to bramble scrub and provide no net loss by creating 0.058ha of mixed scrub in a moderate condition from an area of hardstanding, this is shown on figure 4, below, and shown on the Sheringham New Access to Recycling Centre General Arrangement Plan, Drawing ref. PQ3038-HP4-0100-001 Rev P01, in Appendix 3.

This will provide an increase of 0.39 units, increasing the post-intervention habitat units to 0.99, achieving a net gain of biodiversity of +23.88%, meaning overall, there is no net loss of habitats and the trading rules have been satisfied.

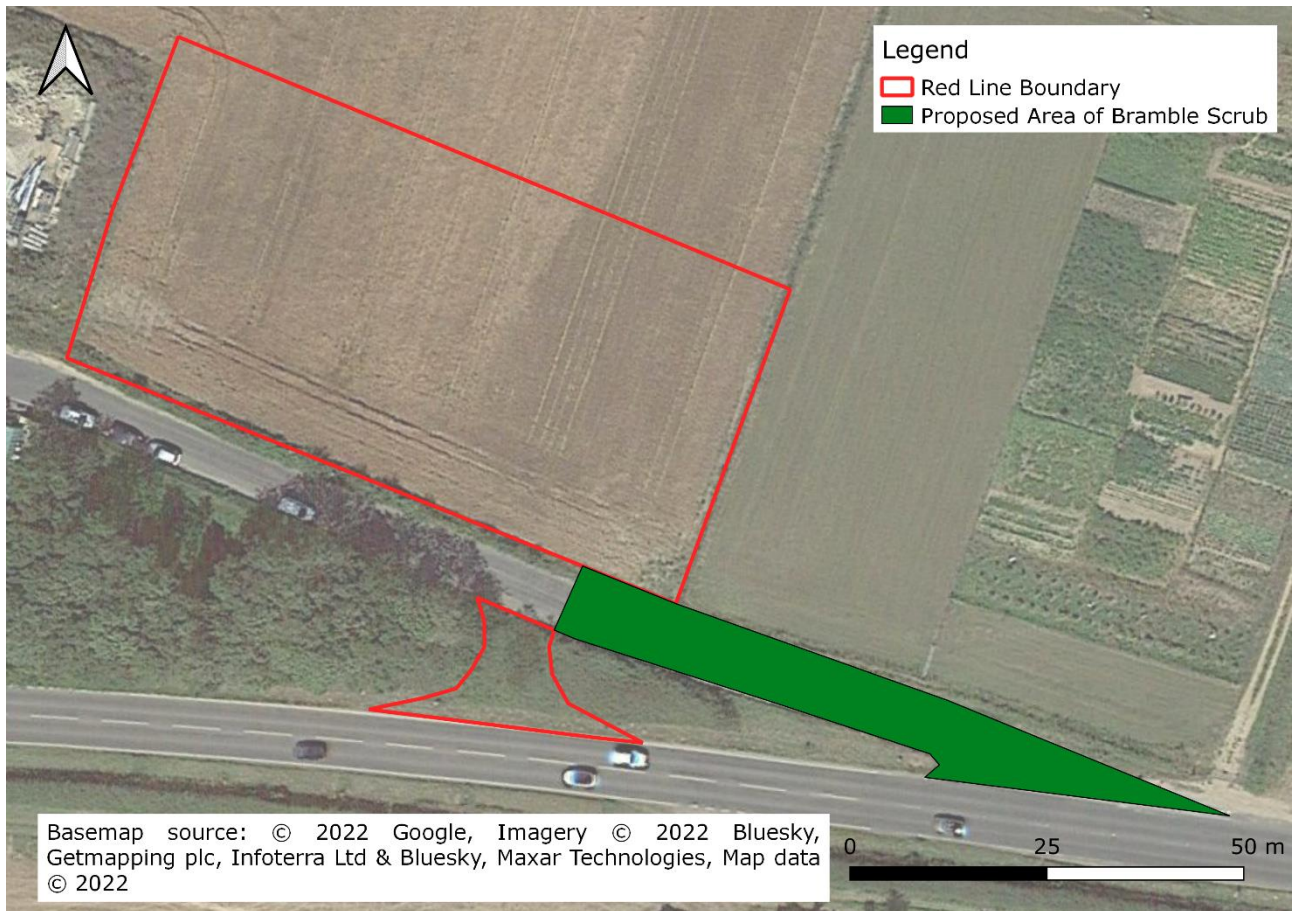


Figure 4. Proposed area of Mixed scrub

5.2.2 Purchase of Biodiversity Credits

If the developer does not wish to actively create and manage off-site habitats to achieve a biodiversity net gain, the alternative would be to purchase biodiversity unit credits from a land bank or similar.

5.3 Achieving Biodiversity Net Gain

The same recommendations to achieve no net loss of biodiversity provided above are relevant for achieving a biodiversity net gain on site, the planting of 0.058ha of mixed scrub in a moderate condition from an area of hardstanding, as shown on figure 4 above, will achieve a net gain of biodiversity of +23.88%.

In addition, the preliminary ecological appraisal report (ref. **R.7**) recommends the following ecological enhancements are considered for the scheme:

- Planting of native plant species beneficial to wildlife should be incorporated into the final design. This will provide additional habitat for invertebrates, which will in turn provide a food source for reptiles, birds, bats, and Hedgehog.
- The final development plan should incorporate bat and bird boxes into the scheme. This will provide

additional roosting and nesting habitats for bats and birds post-development. Recommendations for specifications for wildlife boxes are included within the preliminary ecological appraisal report.

5.4 Recommendations to Achieve Target Condition of Proposed Onsite Habitats

It is recommended that a Landscape and Ecological Management Plan (LEMP) is produced to ensure the habitats on site are created managed to the appropriate condition specified within this report, to achieve the condition assumed. It is recommended that the BNG calculations are updated at the same time as the LEMP.

Recommendations to achieve the target condition for proposed retained and/or enhanced habitats are included below.

5.4.1 Developed Land; Sealed Surface

There is no habitat requirement for developed land. Further fauna enhancement can be provided in the form of bird/ bat boxes within the buildings. Recommendations for integrated bird/bat boxes are included in the preliminary ecological appraisal report (ref. **R.7**).

5.4.2 Bioswale

The bioswales onsite should be able to achieve moderate condition if two of four of the following criteria are achieved based upon Table 4 below:

Table 4 – Bioswale Condition Assessment Criteria		
	Condition Assessment Criteria	How this is Achieved
1	Vegetation structure is varied, providing opportunities for insects, birds and bats to live and breed. A single ecotone (i.e. scrub, grassland, herbs) should not account for more than 80% of the total habitat area.	The bioswale will be seeded with an appropriate wildflower seed mix, such as Emorsgate EM3. The bioswale will be manage to ensure the structure is varied.
2	"There is a diverse range of flowering plant species, providing nectar sources for insects. These species may be either native, or non-native but beneficial to wildlife.	The bioswale will be seeded with an appropriate wildflower seed mix, such as Emorsgate EM3.
3	Invasive non-native species (Schedule 9 of WCA) cover less than 5% of total vegetated area.	The grassland will be managed to ensure invasive species are absent and will be protected from damage.
4b	The water table is at or near the surface throughout the year. This could be open water or saturation of soil at the surface.	It is uncertain as to whether this criteria will be met on this site.

5.4.3 Other Neutral Grassland

To achieve a good condition, the other neutral grassland should meet 5 of 6 of the following criteria, outlined in Table 5 below:

Table 5 – Other Neutral Grassland Condition Assessment Criteria

	Condition Assessment Criteria	How this is Achieved
1	The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward.	The grassland will be seeded with an appropriate wildflower seed mix, such as Emorsgate EM3. The grassland will be managed as a wildflower meadow, by mowing the grassland once the flowers have set seed in late summer (e.g., August), leaving the cuttings to dry in-situ to allow the seeds to shed from the cuttings. After two weeks the cuttings will be removed.
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	A diversity of species will create a diverse sward height. Additional sward diversity will be achieved with the adjacent bioswales and edge of the site.
3	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	Small areas of bare ground are assumed to be present within the area, such as ant hills, mole hills and rabbit warrens.
4	Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.	Bracken and Bramble will be treated appropriately (spot treatment, hand pulling or brush cutting) to ensure the cover is less than the required amount.
5	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of species indicative of sub-optimal condition ¹ 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.	The grassland will be managed to ensure invasive species are absent and will be protected from damage.
6	There are greater than 9 species per metre squared.	The grassland will be seeded with an appropriate wildflower seed mix, such as Emorsgate EM3.

5.5 Mixed Scrub

To achieve moderate condition, mixed scrub should achieve three of five of the following criteria, outlined in Table 6 below:

Table 6 – Mixed Scrub Condition

	Condition Assessment Criteria	How this is achieved
1	Habitat is representative of UKHab description (where in its natural range). There are at least three woody species, with no one species comprising more than 75% of the cover (except Common Juniper, Sea Buckthorn or Box, which can be up to 100% cover).	This will be achieved by planting a diverse mix of scrub comprising of at least three species (such as Hawthorn, Blackthorn and Dog rose). Scrub will be managed by thinning, such that no one species dominates the cover.
2	There is a good age range – all of the following are present: seedlings, young shrubs and mature shrubs.	This is unlikely to be achieved on this site.
3	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981) and undesirable species make up less than 5% of ground cover.	This will be achieved by regular monitoring and remedial actions, where appropriate (such as herbicide spot treatment, hand pulling or other method dependant on the undesirable species present).
4	The scrub has a well-developed edge with scattered scrub and tall grassland and/or herbs present between the scrub and adjacent habitat(s).	The scrub habitats will be adjacent to grassland areas which provides the grassland and herb mosaic. The scrub will likely be regularly cut back as part of the roadside maintenance, which will maintain the edge habitat.

5	There are clearings, glades or rides present within the scrub, providing sheltered edges.	This is unlikely to be achieved on this site.
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5.6 Further Survey and Assessment Required

No further survey and/or assessment is required to finalise the BNG feasibility assessment. If required as the design progresses, recalculations of likely credits may be requested to determine the feasibility of achieving biodiversity net gains at the site.

A full Landscape and Ecological Management Plan should be produced to provide detail of the creation and management of the habitats. It is considered that this should be requested by the Local Planning Authority as an appropriately worded planning condition.

5.7 Monitoring

A monitoring programme to measure the progress of habitat enhancements selected to take forward should be included in any future habitat management plan.

6. CONCLUSIONS

When assessing the site as shown on the Proposed Development Plan, Drawing ref. 49868/2001/101 Rev P05, the site does not achieve 'no net loss of biodiversity' or a 10% biodiversity net gain.

An additional area shown on The Sheringham New Access to Recycling Centre General Arrangement Plan, Drawing ref. PQ3038-HP4-0100-001 Rev P01, shows that the old road can be removed, and replanted. This area that could potentially be used to provide an area of scrub planting, that would satisfy the need for 'no net loss of biodiversity', and would provide a biodiversity net gain of +23.88%.

The habitats proposed within the scheme need to be of a sufficient quality to achieve the conditions as assessed within these calculations. Specifications for the creation and management of these features are summarised within this report.

A full Landscape and Ecological Management Plan should be produced to provide detail of the creation and management of the habitats. It is considered that this should be requested by the Local Planning Authority as an appropriately worded planning condition. The landscape and ecological management plan would need to include the area of scrub planting on the old road.

Final calculations of biodiversity units should be provided at the same time as the Landscape and Ecological Management Plan to ensure that the proposals provide a biodiversity net gain.

Provided the recommendations within this report are followed and the mitigation hierarchy of avoidance, mitigation, compensation and enhancement is implemented throughout the detailed design process, potential negative effects from development on important ecological features will be negligible, and a biodiversity net gain will be achieved.

APPENDICES

Appendix 1 – Report Limitations and Conditions

General Limitations and Exceptions

This report was prepared solely for our Client for the stated purposes only and is not intended to be relied on by any other party or for any other use. No extended duty of care to any third party is implied or offered. Third parties should not rely on the facts, matters or opinions set out in this report without the express written permission of Geosphere Environmental Ltd.

Geosphere Environmental Ltd does not purport to provide specialist legal advice.

The Executive Summary, Conclusions and Recommendations sections of the report provide an overview and guidance only and should not be specifically relied upon until considered within the context of the whole report.

Interpretations and recommendations contained within the report represent our professional opinions, which were arrived at in accordance with currently accepted industry practices at the time of reporting and based upon current legislation in force at that time.

Ecology Limitations and Exceptions

Any limitations associated with the report will be stated. The consequences of any limitations, findings and/or recommendations in the report are made clear in line with CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine, Chartered Institute of Ecology and Environmental Management, Winchester and BSI (2013) BS 42020:2013 Biodiversity – ‘Code of practice for planning and development’.

This report is prepared and written in the context of the proposals stated in the introduction to this report and should not be used in a differing context.

The wildlife and habitats present on any site are subject to change over time. Surveys of this kind can have limited validity, with the possibility of behaviour patterns and territory boundaries varying over time, due to the dynamics of adjacent populations.

New information, improved practices and legislation may necessitate an alteration to the report in whole or in part after its submission. Therefore, with any change in circumstances or after the expiry of one year from the date of the report, the report should be referred to us for re-assessment and, if necessary, re-appraisal.

It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no survey or assessment can ensure the complete characterisation of the natural environment.

Unless stated specifically, drawings and plans are indicative only. As such, the position of features marked on the plans or drawings should not be taken as 100% accurate.

If bats or any other European protected species are found to be present onsite and the proposed activities will cause disturbance or destruction of a roost site then this report will only summarise the potential requirements. For works to continue a detailed mitigation plan with appropriate compensation measures would be required and a development licence would need to be sought from Natural England.

This survey does not constitute an invasive species survey and should not be treated as such.

Owing to seasonal variances and prevailing weather, conditions may sometimes be sub-optimal for surveying and this may delay or disrupt planned survey programmes. If applicable, full details are given in the report.

Geosphere Environmental Ltd may not be aware of information that could be held by other organisations or individuals, and it is always possible for features of nature conservation interest to be unrecorded during surveys.

Scientific survey data will be shared with local biological records centre in accordance with the CIEEM professional code of conduct.

Appendix 2 – References

- R.1.** Panks, Stephen et. al. (April 2022). Natural England Joint Publication JP039 Biodiversity Metric 3.1, Auditing and Accounting for Biodiversity: User Guide. <http://publications.naturalengland.org.uk/file/6593707725029376>
- R.2.** Ministry of Housing, Communities and Local Government (MHCLG) (2021) National Planning Policy Framework (NPPF).
- R.3.** ODPM (2005) Government Circular: Biodiversity and Geological Conservation – statutory obligations and their impact within the planning system.
- R.4.** North Norfolk District Council. (January 2023). North Norfolk Proposed Local Plan 2016 to 2036 (Reg 19). https://consult.north-norfolk.gov.uk/portal/planning/north_norfolk_local_plan/proposed_submission_version_local_plan/localplan?pointId=5871922#document-5871922
- R.5.** CIEEM, CIRIA, IEMA. (2016). Biodiversity net gain. Good practice principles for development. <https://cieem.net/wp-content/uploads/2019/02/Biodiversity-Net-Gain-Principles.pdf>
- R.6.** BSi (2021). Process for designing and implementing Biodiversity Net Gain – Specification. BS 8683:2021.
- R.7.** Geosphere Environmental Limited (October 2022). Preliminary Ecological Appraisal. Report ref. 6985,EC,PEA,EB,RF,AC,26-10-22,V1
- R.8.** Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020) The UK Habitat Classification user Manual Version 1.1 at <http://www.ukhab.org/>
- R.9.** Panks, Stephen et. al. (April 2022). Natural England Joint Publication JP039 Biodiversity Metric 3.1, Auditing and Accounting for Biodiversity: Technical Supplement. <http://publications.naturalengland.org.uk/file/4679356076261376>

Appendix 3 – Drawings

Proposed Development Plan – Drawing ref. 49868/2001/101 Rev P05

The Sheringham New Access to Recycling Centre General Arrangement Plan – Drawing ref. PQ3038-HP4-0100-001 Rev P01

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Notes

UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

- All dimensions are in millimetres unless noted otherwise.
- All levels are in metres relative to Ordnance Datum Newlyn unless noted otherwise.
- All coordinates are in metres relative to Ordnance Survey National Grid.
- The Contractor is to verify all dimensions on site before commencing work or preparing shop drawings.
- This drawing is to be read in conjunction with all Engineers and Architects drawings and specifications.

P05 Site levels and issue status updated	DF	TB	2023.01.09
Issued/Revision	By	Appd	YYYY.MM.DD
	DF	TB	2022.08.22
	Dwn.	Dsgn.	Chkd. YYYY.MM.DD

Issue Status

PLANNING APPROVAL

This document is suitable only for the purpose noted above. Use of this document for any other purpose is not permitted.

Client/Project Logo



Client/Project
NORFOLK COUNTY COUNCIL

SHERINGHAM RECYCLING CENTRE

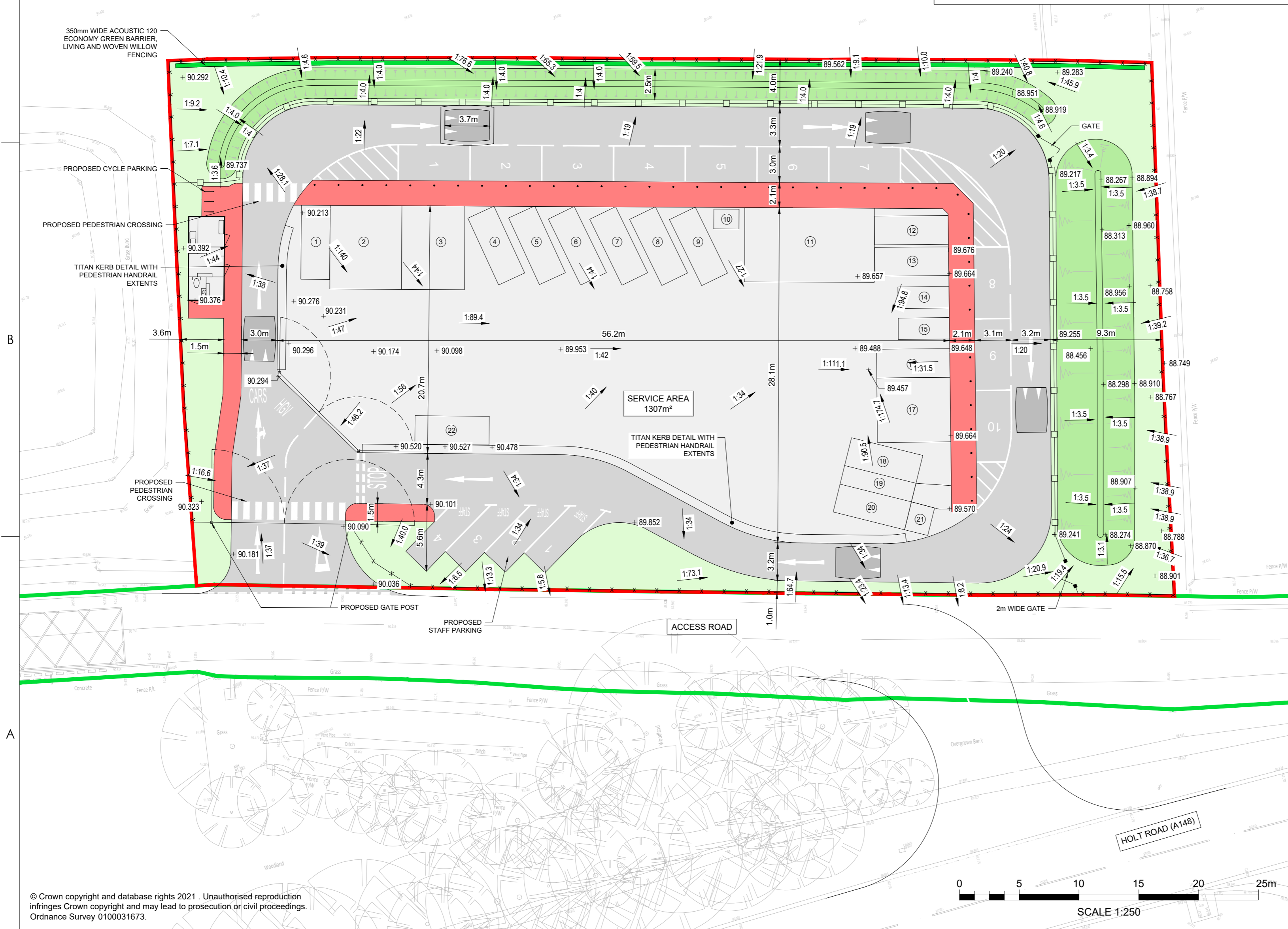
Title
PROPOSED GENERAL ARRANGEMENT AND LEVEL DESIGN

Project No. 49868	Scale A2 @ 1:250
Revision P05	Drawing No. 49868/2001/101

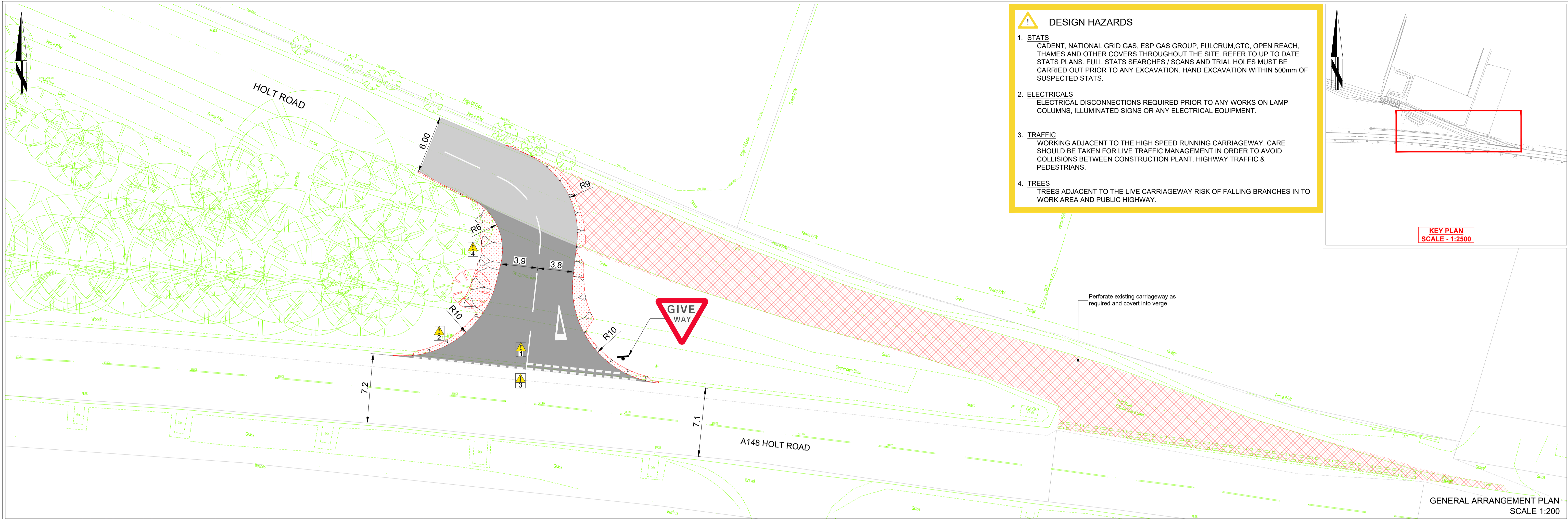
BIN STORAGE	
NUMBER	TYPE
1	BRIC-A-BRAC
2	RE-USE STORE
3	SPECIALIST STORAGE
4	GARDEN
5	GARDEN
6	CARD
7	RESIDUAL
8	RESIDUAL
9	SPARE
10	VIEWING SHELTER
11	LRG. DOMES, APPLIANCES, TEXTILES, BOOKS, TYRES & OIL
12	FRIDGE-FREEZERS
13	TVs & MONITORS
14	ALUMINUM
15	FLAT GLASS
16	RUBBLE
17	PASTERBOARD
18	SCRAP METAL
19	GANTRY
20	WOOD
21	STATIC COMPACTOR
22	SPARE

Key

- SITE BOUNDARY
- EXISTING HIGHWAY BOUNDARY
- PROPOSED CARRIAGEWAY
- PROPOSED SERVICE AREA
- PROPOSED PEDESTRIAN WALKWAY (CONTRASTING COLOUR TBC)
- PROPOSED LANDSCAPE AREA
- PROPOSED DRAINAGE SWALE
- (11) BIN STORAGE & REFERENCE CODE
- x — x — x — PROPOSED PERIMETER CHAIN LINK & BARBED WIRE FENCE
- o — o — o — PROPOSED TIMBER TRIP RAIL FENCE, POSTS AT 2m CENTRES
- PROPOSED SPEED HUMP - TYPE AND SIZE TBC



Plotted: 09.01.2023 20:23:12 PM By: Foulkes, David
 ORIGINAL SHEET - SOA2 \\cam-vfp-001\cam\projects\9868 sheringham recycling centre\cad\dwg\p\2001_cnv\9868_2001_101 - general arrangement



Tom McCabe
Executive Director of
Community and Environmental Services
Norfolk County Council
County Hall, Martineau Lane
Norwich NR1 2SG

DRAWING TITLE
SHERINGHAM, NEW ACCESS TO RECYCLING CENTRE
GENERAL ARRANGEMENT
SHEET 1 OF 1

REV.	DESCRIPTION	CHECKED	DATE
P01	FIRST ISSUE	--	--

DESIGNED BY	INITIALS	DATE	DRAWING No. PQ3038-HP4-0100-001
	PKN	28-10-22	
DRAWN BY	RS	28-10-22	PROJECT TITLE SHERINGHAM, NEW ACCESS TO RECYCLING CENTRE
CHECKED BY	TL	28-10-22	SCALE AS SHOWN
APPROVED BY	RF	28-10-22	FILE No. PQ3038

Appendix 4 – Habitat Condition Assessment Forms

Survey cover sheet			
Date	02-Oct-22	Site name or location	Sheringham Recycling Centre
Weather conditions	12°C, 14mph and 100% Cloud Cover	Project/development name	
Surveyor name(s)	Eleanor Baker/Richard Fenna	Onsite/offsite	
Metric 3.1 survey reference		Reason for assessment (if not baseline condition survey)	
Notes			

Condition Sheet: GRASSLAND Habitat Type (medium, high & very high distinctiveness)			
UKHab Habitat Type(s)			
Grassland - Lowland calcareous grassland Grassland - Lowland dry acid grassland Grassland - Lowland meadows Grassland - Other lowland acid grassland Grassland - Other neutral grassland Grassland - Tall herb communities (H6430) [Note Tall herb habitat that does not meet the Annex 1 definition should be recorded as "Other neutral grassland"] Grassland - Upland acid grassland Grassland - Upland calcareous grassland Grassland - Upland hay meadows Sparsely vegetated land - Calaminarian grassland			
Site name/location		Onsite/offsite	
Central grid reference of habitat		Unique polygon reference	
Limitations (if applicable)		Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
<p>See UKHab</p>			
Condition Assessment Criteria	Condition Achieved (Y/N)	Notes/Justification	
1 The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward. NB - This criterion is essential for achieving moderate condition for non-acid grassland types only.	Y		
2 Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Y		
3 Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	Y		
4 Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.	Y		
5 There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of species indicative of sub-optimal condition ¹ 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.	N		
Additional Group (Non-acid types only)			

6	There are greater than 9 species per metre squared. NB - This criterion is essential for achieving good condition (non-acid grassland types only).	Y	
Criterion 1 Achieved (Essential for good condition for non-acid grassland) (Y/N)			
		Number of criteria passed	
Condition Assessment Result	Condition Assessment Score	Score Achieved x/√	
Acid Grassland Types			
Passes 5 of 5 criteria	Good (3)		
Passes 3 or 4 of 5 criteria	Moderate (2)		
Passes 0, 1 or 2 of 5 criteria	Poor (1)		
Non-acid grassland Types			
Passes 5 of 6 criteria, including essential criterion 1 and 6.	Good (3)	Good	
Passes 3 or 4 of 6 criteria, including essential criterion 1.	Moderate (2)		
Passes 0, 1, 2 criteria of 6 criteria; OR Passes 3 or 4 criteria excluding criterion 1 and 6	Poor (1)		
Suggested enhancement interventions to improve condition score			
Notes			
<p>Footnote 1 - Species indicative of sub-optimal condition for this habitat type include: Creeping thistle <i>Cirsium arvense</i>, spear thistle <i>Cirsium vulgare</i>, curled dock <i>Rumex crispus</i>, broad-leaved dock <i>Rumex obtusifolius</i>, common nettle <i>Urtica dioica</i>, creeping buttercup <i>Ranunculus repens</i>, greater plantain <i>Plantago major</i>, white clover <i>Trifolium repens</i>, cow parsley <i>Anthriscus sylvestris</i>.</p>			

Condition Sheet: WOODLAND Habitat Type
UKHab Habitat Type(s)

Woodland and forest - Lowland beech and yew woodland
 Woodland and forest - Lowland mixed deciduous woodland
 Woodland and forest - Native pine woodlands
 Woodland and forest - Other coniferous woodland
 Woodland and forest - Other Scot's pine woodland
 Woodland and forest - Other woodland; broadleaved
 Woodland and forest - Other woodland; mixed
 Woodland and forest - Upland birchwoods
 Woodland and forest - Upland mixed ashwoods
 Woodland and forest - Upland oakwood
 Woodland and forest - Wet woodland

Site name/location		Onsite/offsite	
Habitat's Central Grid		Unique polygon	
Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)		Limitations (if applicable)	

Habitat Description

[See UKHab](#)

This condition sheet is based on the England Woodland Biodiversity Group (EWBG) Woodland Condition Survey Method, available here: <https://woodlandwildlifetoolkit.sylva.org.uk/assess>

Condition Assessment Criteria

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator	Notes/Justification
1 Age distribution of trees¹	Three age classes present	Two age classes present	One age class present	1	
2 Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland ²	Evidence of significant browsing pressure is present in 40% or less of whole woodland	Evidence of significant browsing pressure is present in 40% or more of whole woodland	3	
3 Invasive plant species³	No invasive species present in woodland	Rhododendron or laurel not present, other invasive species < 10% cover	Rhododendron or laurel present, or other invasive species > 10% cover	1	
4 Number of native tree species	Five or more native tree or shrub species found across woodland parcel	Three to four native tree or shrub species found across woodland parcel	None to two native tree or shrub species across woodland parcel	2	
5 Cover of native tree and shrub species	> 80% of canopy trees and >80% of understory shrubs are native	50-80% of canopy trees and 50-80% of understory shrubs are native	< 50% of canopy trees and <50% of understory shrubs are native	2	

6	Open space within woodland⁴	10 – 20% of woodland has areas of temporary open space, unless woodland is <10ha in which case lower threshold of 10% does not apply	21- 40% of woodland has areas of temporary open space	More than 40% of woodland has areas of temporary open space	3	
7	Woodland regeneration⁵	All three classes present in woodland; trees 4-7cm dbh, saplings and seedlings or advanced coppice regrowth	One or two classes only present in woodland	No classes or coppice regrowth present in woodland	1	
8	Tree health	Tree mortality less than 10%, no pests or diseases and no crown dieback	11% to 25% mortality and/or crown dieback or low risk pest or disease present	Greater than 25% tree mortality and or any high risk pest or disease present	2	
9	Vegetation and ground flora	Ancient woodland flora indicators present	Recognisable NVC plant community present	No recognisable NVC community	1	
10	Woodland vertical structure⁶	Three or more storeys across all survey plots or a complex woodland	Two storeys across all survey plots	One or less storey across all survey plots	1	
11	Veteran trees⁷	Two or more veteran trees per hectare	One veteran tree per hectare	No veteran trees present in woodland	1	
12	Amount of deadwood	50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Between 25% and 50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Less than 25% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	1	
13	Woodland disturbance⁸	No nutrient enrichment or damaged ground evident	Less than 1 hectare in total of nutrient enrichment across woodland area and/or less than 20% of woodland area has damaged ground	More than 1 hectare of nutrient enrichment and/or more than 20% of woodland area has damaged ground	3	

Total Score 22

Condition Assessment Result	Condition Assessment Score	Result Achieved
Total score >32 (33 to 39)	Good (3)	Poor
Total score 26 to 32	Moderate (2)	
Total score <26 (13 to 25)	Poor (1)	

Suggested enhancement interventions to improve condition score



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Ec

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Kw

Knotweed.

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