



Biodiversity Net Gain Design Stage Report

Marsden Island

CS District Ltd.

SHF.9022.001.EC.R.003



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Biodiversity Net Gain Design Stage Report

Project:	Marsden Island
For:	CS District Ltd.
Status:	Rev A
Date:	13 th October 2025
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Non-Technical Summary

- i. In April 2025 Enzygo Ltd was commissioned by CS District Ltd. (the Client) to undertake a DEFRA Statutory Biodiversity Metric calculation for the proposed development at Marsden Island, Cellars Clough, Marsden, HD7 6LY (central grid reference SE 05852 12535), located within the Kirklees Metropolitan Council planning authority. This calculation indicates that there is currently an anticipated net loss of **3.81%** in habitat units and a **29.49%** loss in hedgerow units. This report will inform a planning application for a residential development.
- ii. This calculation is based on baseline habitats recorded as part of the Preliminary Ecological Appraisal (PEA) (Enzygo, 2025a), proposed habitat creation and enhancement outlined in the BNG Metric (Enzygo, 2025b) and Landscape Plan (CITU, 2025), and commitment to management proposals as outlined in this report.
- iii. The site supports the following baseline value:
 - Habitat Units: 5.24
 - Hedgerow Units: 2.47
 - Watercourse Units: TBC (this report will be updated once the results of the River Condition Assessment are available)
- iv. It is confirmed that there are no existing irreplaceable habitats present. Whilst there are no habitats of very high distinctiveness, Reedbed habitat is present in the west of the site and is of high distinctiveness. In this instance, the Trading Rules have been satisfied for Very High and High for habitat units, and Very High, Medium, Low and Very Low for hedgerow units.
- v. As detailed within the PEA report (Enzygo, 2025a) further biodiversity enhancement measures are proposed which are not accounted for within the Statutory Biodiversity Metric. These include provision of bird and bat boxes.

1.0 Introduction

1.1 Commission

- 1.1.1 In April 2025 Enzygo Ltd was commissioned by CS District Ltd. (the Client) to undertake a DEFRA Statutory Biodiversity Metric calculation for the proposed development at Marsden Island, Cellars Clough, Marsden, HD7 6LY (central grid reference SE 05852 12535), located within the Kirklees Metropolitan Council planning authority. This report will inform a planning application for a residential development.

1.2 Background

- 1.2.1 The application is also supported by a PEA report (Enzygo, 2025a) which has been used to inform the baseline habitats and associated conditions, and a Landscape Plan (CITU, 2025) which illustrates the proposed habitat creation and enhancements. A separate Defra Metric calculation has been produced reflecting the details presented within this report (Enzygo, 2025b). This report will be updated once the results of the River Condition Assessment are available.

1.3 Site Description

- 1.3.1 The approximately 1.5ha site lies in the north east of Marsden, a village in the borough of Kirklees in West Yorkshire. The site is predominantly comprised of an area of vacant or derelict land in the centre of the site, with an unfinished building constructed in the south of this feature. In the east of the site is an area of modified grassland. The west of the site features a watercourse sided by both reedbeds, other neutral grassland and a parcel of Willow (*Salix* spp.) scrub. Lengths of native hedgerow with trees are present along the northern and southern boundary. A pedestrian/cycle path sides the River Colne and is found in the south west of the site and a hardstanding access track to the site is present on the southern boundary, joining Manchester Road south of the site and sided by woodland – much of which is Lowland Mixed Deciduous Woodland Habitat of Principal Importance (HPI) – on both sides.
- 1.3.2 Adjacent to the site on the western aspect is Cellars Clough reservoir, with the River Colne abutting the site on the southern aspect. To the immediate east is an area of grassland with scattered trees, some of which were found to be mature. Adjacent to the northern boundary is Huddersfield Narrow Canal LWS. The wider landscape is comprised of areas of grassland and woodland, with occasional roads and built development of villages and towns within Kirklees.

Figure 1 – Site Area



Image courtesy of Google Image Pro 7.3.6.10201, [Grid Ref: SE 05852 12535]. Imagery date 19th March 2025
Image accessed 13th June 2025.

1.4 Proposed Development

- 1.4.1 The study will inform proposals for a residential development, including access routes, roads and landscaping of public open space. The Landscape Plan (CITU, 2025) proposes localised hedgerow removal. Dwellings will be developed in the centre of the site, with a car park in the south of the site. Areas of meadow, amenity lawn, and community growing spaces, as well as individual tree planting are dotted throughout the site, with a play area also proposed in the west of the site.
- 1.4.2 No significant noise, air quality, dust or recreational impacts are anticipated considering the nature and location of development. Potential lighting impacts are considered and addressed within the PEA report (Enzygo, 2025a).

1.5 Planning Status

- 1.5.1 This Design Stage Report is to be submitted with the planning application which shall include details of the confirmed Site layout and confirms details of the proposed habitat creation and landscape planting (CITU, 2025).

1.6 Aims and Objectives

1.6.1 The purpose of this report is to:

- Confirm the baseline habitat units based on appropriate survey and assessment, and anticipated post-development habitat units based on a fixed Site design and landscape proposals;
- Confirm whether the scheme is to achieve an overall 10% net gain in habitat units, and whether off-site areas or alternative compensation is required to achieve this;
- Present a strategy of implementation, including timings, based on a confirmed fixed Site design and landscape proposals;
- Present proposed maintenance and monitoring measures in order to ensure habitat target conditions will be secured; and,
- Detail the bodies/persons responsible for delivering the scheme.

1.6.2 This document has been produced with reference to Biodiversity Net Gain Report and Audit Templates (CIEEM, 2021).

1.7 Relevant Policy & Legislation

National Policy

1.7.1 The NPPF (2024) set out the Government's planning policies for England and how these are expected to be applied. At the heart of the NPPF is a presumption in favour of sustainable development. The NPPF states that:

1.7.2 The NPPF states that:

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

- *protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
- *recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*
- *maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*
- *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs;*
- *preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible,*

help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and

- *remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.*

Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

To protect and enhance biodiversity and geodiversity, plans should:

- *Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and*
- *promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.*

When determining planning applications, local planning authorities should apply the following principles:

- *if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- *development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- *development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*
- *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.*

The following should be given the same protection as habitats sites:

- *potential Special Protection Areas and possible Special Areas of Conservation;*
- *listed or proposed Ramsar sites; and*

- *sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.*

The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.'

- 1.7.3 In accordance with the Environment Act 2021, there is a requirement to demonstrate at least a +10% net gain (habitats, hedgerows, rivers where applicable). NPPF and Local Planning Policies may also set higher net gain targets. Additionally, there may also be the requirement for the incorporation of additional enhancements i.e. set number of bird/bat boxes, invertebrate tubes etc, which do not form part of the BNG metric calculation.

Local Policy

- 1.7.4 The following policies of the Kirklees Local Plan Strategy and Policies document (Kirklees Council, 2019a) are applicable to biodiversity and nature conservation (provided in summary only and the full Local Plan document should be viewed for full details):

- **Policy LP30 Biodiversity and Geodiversity** – to be protected and enhanced in Kirklees, including international, national and locally designated wildlife and geological sites, Kirklees Wildlife Habitat Network and Habitats and Species of Principal Importance. Harmful impacts to statutory designated sites are a result of proposed developments are avoided. Proposals with an adverse effect on a Local Wildlife Site (LWS), Local Geological Site (LGS), Ancient Woodland, Veteran tree or other important tree will need to show benefits outweigh the need to safeguard the local conservation value of the site or feature. Long term compensation will be required if proposals impact Habitats and Species of Principal Importance. Development proposals will be required to result in no significant loss to biodiversity in Kirklees following the mitigation hierarchy, with net gains shown through good design and including biodiversity enhancements. Proposals should incorporate biodiversity enhancement measures to reflect the priority habitats and species identified for the relevant Kirklees Biodiversity Opportunity Zone.
- **Policy LP31 Strategic Green Infrastructure Network** – priority given to safeguarding and enhancing green infrastructure networks. Development proposals within or adjacent to these networks should ensure network function is retained or replaced, new or enhanced green infrastructure is added to the development scheme where appropriate, walking and cycling transport routes are integrated where possible and biodiversity is protected and enhanced, especially within the Kirklees Wildlife Habitat Network.
- **Policy LP33 Trees** – proposals which directly or indirectly threaten trees or woodland of significant amenity will not be granted. Proposals should retain valuable or important trees, noted by their distinctiveness, contribution to amenity or Wildlife Habitat Network or green infrastructure networks.
- **Policy LP34 Conserving and Enhancing the Water Environment** – proposals must ensure no deterioration of water courses or water bodies and where possible enhance

the geomorphology and ecology of these watercourses. Source Protection Zones must be protected from contamination and surface water must be disposed of correctly (in line with the Local Plan drainage policy).

- 1.7.5 The Kirklees Council Development Plan policies map indicates the site is within the Strategic Green Infrastructure Network (River Colne Corridor), a Biodiversity Opportunity Zone (Flood Plains) and within Green Belt land (Kirklees Council, 2025a).
- 1.7.6 The Kirklees Biodiversity Opportunity Zones: Background report lists objectives/opportunities within the Floodplain and Riverine Corridors Zone (Kirklees Council, N/Aa). In addition, the Kirklees Biodiversity Opportunity Zones: Tables report lists habitats and species of principal importance for the Flood Plains and Riverine Zone (Kirklees Council, N/Ab). There is also a Habitat Action plan for Rivers, Riverine Corridors and Associated Habitats (Kirklees Council, N/Ac).
- 1.7.7 A map of the Kirklees Wildlife Habitat Network indicates the site is not within the network (Kirklees Council, N/Ac).
- 1.7.8 The Kirklees Habitats of Principal Importance (Kirklees Council, 2007a) and Species of Principal Importance (Kirklees Council, 2007b) cover the Kirklees Biodiversity Action Plan.

2.0 Methodology

2.1 Desk Study & Field Survey

- 2.1.1 Desk study and field survey information used to inform the biodiversity net gain assessment is presented within the PEA report (Enzygo, 2025a) submitted in support of the planning application. This includes mapping and assessment of existing baseline habitats utilising the UK Habitat Classification (UKHab) methodology (UKHab, 2023), and a desk study including review of statutory designated sites, locally designated wildlife sites, any notified Local Biodiversity Action Plan (BAP), Local Plans and local records data in order to inform the assessment of strategic significance.

2.2 Approach to BNG

- 2.2.1 BNG Feasibility information (where this did not form part of a BNG Feasibility Report or part of a Preliminary Ecological Appraisal [PEA]) has been included. For example, where different options have been appraised/feasibility of BNG has been considered, justification for the preferred option is provided.
- 2.2.2 A BNG Design Stage Report is produced once site layouts are finalised. This is aimed at decision-makers, e.g., a local planning authority, at the design consent stage of a project (i.e., to form part of a planning application submission alongside an Ecological Impact Assessment (EclA) Report).
- 2.2.3 BNG has been designed in accordance with BS 8683:2021 Process for designing and implementing biodiversity net gain – Specification (British Standard, 2021), Biodiversity Net Gain: Good practice principles for development (CIEEM, CIRIA, IEMA, 2016), and Biodiversity net gain. Good practice principles for development: A practical guide (Baker, 2016).
- 2.2.4 Information on habitat condition assessments and strategic significance has been completed in accordance with The Statutory Biodiversity Metric User Guide (DEFRA, 2024). Habitat areas for the baseline and proposed have been measured using COREO, using the UK Habitat Classification plan appended to the PEA report (Enzygo, 2025a) and the Landscape Plan (CITU, 2025)

2.3 Evidence of Technical Competence and Experience

- 2.3.1 This Design Stage Report and accompanying Metric calculation have been completed by KT Smith MSc BSc (Hons) Consultant Ecologist at Enzygo. Both documents have been reviewed and approved by Chris Schofield MSc BSc (Hons) ACIEEM Principal Ecologist at Enzygo and with over 8 years' experience as an Ecologist. It is confirmed that both individuals have the training, qualifications, experience, knowledge and skills to undertake this task in accordance with the CIEEM competency framework. Both keep up to date on all related guidance and policy changes.

2.4 Limitations

- 2.4.1 The PEA report (Enzygo, 2025a) details any survey and assessment limitations experienced during recording of the baseline habitat conditions.
- 2.4.2 No limitations were experienced during the undertaking of the DEFRA Metric and production of this report, with all required information available in order to accurately present baseline and post-development habitats and undertake the required habitat condition assessments.

3.0 Baseline Conditions

3.1 Overview of Baseline Habitats

- 3.1.1 The approximately 1.5ha site lies in the north east of Marsden, a village in the borough of Kirklees in West Yorkshire. The site is predominantly comprised of an area of vacant or derelict land in the centre of the site, with an unfinished building constructed in the south of this feature. In the east of the site is an area of modified grassland. The west of the site features a watercourse sided by both reedbeds, other neutral grassland and a parcel of Willow (*Salix* spp.) scrub. Lengths of native hedgerow with trees are present along the northern and southern boundary. A pedestrian/cycle path sides the River Colne and is found in the south west of the site and a hardstanding access track to the site is present on the southern boundary, joining Manchester Road south of the site.

3.2 Important Ecological Features

- 3.2.1 The lines of Native Hedgerow with Trees and Species-rich Native Hedgerow with Trees lining the site boundary represents a UK BAP Priority Habitat, as well as Mature Trees onsite offering limited green infrastructure and wildlife corridor function across the site and through the wider area of built environment. Reedbed habitat in the west of the site serves as Priority Habitat. Huddersfield Narrow Canal Local Wildlife Site (LWS) and River Colne located within 10m of the site and the onsite stream offer blue infrastructure function, with both the river and stream serving as Priority Habitat.
- 3.2.2 There are no designated sites, species or features providing notable ecosystem services which influence the schemes deliverability of Biodiversity Net Gain.

3.3 Baseline metric calculations

- 3.3.1 Refer to the appended UK Habitat Classification Map for a plan showing the baseline habitats, and which has been extracted from the separate PEA (Enzygo, 2025a). In this instance, given the relatively simple nature of the Site it has not been necessary to split the Site into separate numbered parcels which would be useful for cross-referencing on more complex sites.
- 3.3.2 The Site baseline habitats are as follows:
- **Vacant or Derelict Land – 0.773ha**
 - **Developed Land; Sealed Surface – 0.262ha**
 - **Other Neutral Grassland – 0.119ha**
 - **Modified Grassland – 0.269ha**
 - **Reedbeds – 0.057ha**
 - **Urban trees – 0.1099ha**
 - **Willow Scrub – 0.007ha**
 - **Native Hedgerow with Trees – 0.0164km**
 - **Species-rich Native Hedgerow with Trees – 0.138km**

3.4 Justification

- 3.4.1 Baseline habitat information has been extracted from the submitted PEA (Enzygo, 2025a) with field survey information collected in April 2025, with April a suitable time to identify most flora species to allow for classification of commonly occurring habitat types.

4.0 BNG Good Practice Principles for Development

4.1 Justification of BNG Principles

4.1.1 In accordance with Biodiversity Net Gain: Good practice principles for development (CIEEM, CIRIA, IEMA, 2016) each of the BNG principles are identified below. Justification of how each BNG principle has been applied is given, and a statement given on how each is considered alongside the related supporting evidence.

1. **Apply the Mitigation Hierarchy** – through the project design phase and as detailed within the Ecological Impact Assessment report the mitigation hierarchy has been implemented in accordance with BS42020:2013 (BSI, 2013). In this instance, the proposed layout has recognised the ecological importance of the hedgerows, trees, stream and reedbed habitat, and incorporated these into the final site design. Additionally, the proposed planting scheme is recommended to incorporate native species and those known to benefit biodiversity.
2. **Avoid losing biodiversity that cannot be offset by gains elsewhere** – it is confirmed there are no impacts to any irreplaceable habitats anticipated.
3. **Be inclusive and equitable** – consultation will be undertaken with Nature Development Officer at Kirklees Council through the planning process, which has informed the details presented in this report.
4. **Address risks** – the DEFRA Metric confirms that an overall net loss in habitat units is anticipated based on the final Site design and proposed landscape scheme. The target conditions of the proposed habitats recognise the risks and uncertainty associated with this project due to the nature, location and size of the proposals. The proposed management plan is a reviewable document which can be updated over the 30-year period to address any unforeseen required remedial measures or changes to the proposed management.
5. **Make a measurable Net Gain contribution** – the standard and approved DEFRA BNG Metric has been used to quantify impacts to pre-project habitats, and habitat gains from the proposed scheme have been allocated appropriate habitat types in accordance with the UK Habitat Classification and realistic, and where required precautionary, target conditions have been stipulated in accordance with proposed management activities and the Metric condition assessment guidance.
6. **Achieve the best outcomes for biodiversity** – a sensitive final Site design and landscape proposals have been produced based on advice provided by the Ecologist throughout the design of the scheme. In this instance, this includes best practice construction phase mitigation measures, such as consideration of nesting birds, and new extensive new native tree planting. In addition, bird and bat boxes are proposed which shall provide opportunities for UK and Local BAP Priority Species including House Sparrow, Starling, Soprano Pipistrelle.
7. **Be additional** – The habitat gains anticipated here are a direct result of the Proposed Development and implementation of future long-term management. It is confirmed that no existing or proposed management of the Site was in place outside of this scheme, and therefore the proposed habitat gains detailed here would otherwise not be achieved.

8. **Create a Net Gain legacy** – it is confirmed that the Developer has the requisite technical capacity for ensuring successful implementation of the scheme in the long-term. A suitable management company shall be employed to undertake the management operations detailed here to ensure a legacy of net gain at the Site is maintained. The condition of habitats shall be monitored and any required changes to this management plan or specific remedial measures will be implemented. The creation of opportunities for Priority Species shall ensure the scheme contributes to regional and national conservation goals.
9. **Optimise sustainability** – the design of the scheme and proposed landscape planting has balanced the requirements to demonstrate a measurable overall biodiversity net gain with supplemental purchasing of off-site units, but also recognise the nature of the Proposed Development as a retail development.
10. **Be transparent** – all information used to inform the Biodiversity Net Gain assessment is to be publicly available through the Kirklees Council planning website, including the baseline Ecological Impact Assessment, the proposed Landscape Plan, the DEFRA Metric and this Design Stage report.

5.0 Proposed Design

5.1 Overview of Proposed Habitats

- 5.1.1 The final site design has been led by ensuring the required areas of built development in relation to the proposed housing development, roads and access route. However, it has also prioritised incorporating opportunities to maximised biodiversity value and contribute to local and national biodiversity strategies through a sensitively designed Landscape Plan (CITU, 2025). This includes public open space comprised of areas of meadow, amenity grassland, community growing spaces, individual trees, hedgerow and a play area. In addition, onsite reedbed, stream and the majority of hedgerow is to be retained.

5.2 Proposed Metric Calculations

- 5.2.1 Refer to the appendix A for the Landscape Plan (CITU, 2025) for a plan showing the proposed habitats and areas used for the Metric calculation. It is confirmed this map and associated areas are spatially accurate and have been measured using GIS/CAD. In this instance, given the relatively simple nature of the site, it has not been necessary to split the site into separate numbered parcels which would be useful for cross-referencing on more complex sites.

- 5.2.2 The proposed habitats comprise:

- **Developed Land; Sealed Surface – 0.5656ha (proposed) and 0.165ha (retained)**
- **Modified Grassland – 0.372ha (proposed)**
- **Introduced Shrub – 0.113ha (proposed)**
- **Vegetated Garden – 0.012ha (proposed)**
- **Other Neutral Grassland - 0.0112ha (proposed) and 0.071ha (retained)**
- **Urban Tree – 0.3421ha**
 - **0.2484ha (proposed)**
 - **0.0937ha (retained)**
- **Willow Scrub – 0.007ha (retained)**
- **Unvegetated Garden – 0.12ha (proposed)**
- **Reedbeds – 0.0567ha (retained)**
- **Species-rich Native Hedgerow with Trees – 0.066km (retained)**
- **Native Hedgerow with Trees – 0.0164km (retained)**
- **Species-rich Native Hedgerow – 0.03km (retained)**

5.3 Additional Enhancements

- 5.3.1 As detailed within the PEA (Enzygo, 2025a) the scheme is also to include provision of bird and bat boxes, and deadwood hibernacula which are not accounted for within the DEFRA Metric calculation. These additional enhancements shall provide specific opportunities for a range of

Priority Species (such as Soprano Pipistrelle, House Sparrow, Starling etc.) which are likely to be present in the local area, and which are suitable recognising the nature of the Proposed Development.

6.0 BNG Metric

6.1 Summary

- 6.1.1 A DEFRA Statutory Biodiversity Metric calculation has been provided to confirm that the proposed development at Marsden Island, Cellars Clough, Marsden, HD7 6LY (central grid reference SE 05852 12535), located within the Kirklees Metropolitan Council planning authority. This calculation indicates that there is currently an anticipated net loss of **3.81%** in habitat units and a **29.49%** loss in hedgerow units. This report will inform a planning application for a residential development.
- 6.1.2 Below are details and justification of the habitat types chosen, strategic significance allocated, and condition assessments undertaken in full accordance with the Metric Condition Assessments and User Guide.

6.2 Baseline Habitats Calculation

- 6.2.1 The Site baseline habitats are as follows:
- **Vacant or Derelict Land – 0.773ha** - Total area of existing vacant or derelict land identified in the centre of the site. Assessed as of **Poor condition**. See condition assessment sheet for details. Assessed as of Low strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available, and this habitat is not considered ecologically important or offer ecological linkage. Entire area to be lost to development.
 - **Developed Land; Sealed Surface – 0.262ha** - Total area of existing developed land, building, pedestrian path and access route in the south of the site. **No condition assessment applicable to this habitat type**. Assessed as of Low strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available, and this habitat is not considered ecologically important or offer ecological linkage. Access route and pedestrian path to be retained in the south of the site (0.165ha), with the rest lost to development.
 - **Other Neutral Grassland – 0.119ha** - Total area of Other Neutral Grassland, found in the west of the site, siding the watercourse on its southern bank and partially the northern bank. **Assessed as of Moderate condition**. See condition assessment sheet for details. Assessed as of Medium strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available. Whilst not covered in the Kirklees Biodiversity Action Plan (BAP) due to not being a Habitat of Principal Importance (HPI), this habitat does offer ecological linkage to the wider environment and offers foraging and refuge opportunities for local wildlife. Areas to be retained at condition Moderate (total of 0.071ha), with the rest lost to development of play area, footpath and residential development.
 - **Modified Grassland – 0.269ha** - Total area of Modified Grassland identified in the east of the site. **Assessed as of Poor condition**. See condition assessment sheet for details. Assessed as of Low strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available, and this habitat is not considered

ecologically important or offer ecological linkage. Entire area to be lost to development.

- **Reedbeds – 0.0567ha** - Total area of Reedbed habitat, identified in the west of the site. **Assessed as of Moderate condition.** See condition assessment sheet for details. Assessed as of High strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available, however Reedbeds are considered a Habitat of Principal Importance in the Kirklees Biodiversity Action Plan (BAP), with the Floodplain considered a key geographical area, where this proposal resides. Whilst not mapped, this habitat also offers ecological linkage and is considered ecologically important, offering foraging and refuge opportunities for local wildlife. Entire area to be retained at condition Moderate.
- **Urban trees – 0.1099ha** - Comprised of 0.0733ha of Good Condition, and 0.0366ha of Moderate Condition:
 - Total area of trees assessed as of **Good condition.** See condition assessment sheet for details. Covers T050, T055, T056 and T061 in the Arb Reports. Calculated via the Tree Helper on the Main Menu tab of this metric. Assessed as of Medium strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available. Whilst not covered in the Kirklees Biodiversity Action Plan (BAP) due to not being a Habitat of Principal Importance (HPI), this habitat does offer ecological linkage to the wider environment and offers foraging and refuge opportunities for local wildlife, whilst providing green infrastructure function. All to be retained, according to the Arborticultural Impact Assessment (AIA) report (Enzygo, 2025c)
 - Total area of trees assessed as of **Moderate condition.** See condition assessment sheet for details. Covers T052, T062 and T070 in the Arb Reports. Calculated via the Tree Helper on the Main Menu tab of this metric. Assessed as of Medium strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available. Whilst not covered in the Kirklees Biodiversity Action Plan (BAP) due to not being a Habitat of Principal Importance (HPI), this habitat does offer ecological linkage to the wider environment and offers foraging and refuge opportunities for local wildlife, whilst providing green infrastructure function. AIA report indicates T062 is to be retained (Enzygo, 2025c).
- **Willow Scrub – 0.007ha** - Total area of existing Willow Scrub identified in the south west of the site. **Assessed as of Poor Condition.** See condition assessment sheet for details. Assessed as of Medium strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available. Whilst not covered in the Kirklees Biodiversity Action Plan (BAP) due to not being a Habitat of Principal Importance (HPI), this habitat does offer ecological linkage to the wider environment and offers foraging and refuge opportunities for local wildlife, whilst providing some green infrastructure function. Entire area to be retained as condition Poor.
- **Native Hedgerow with Trees – 0.0164km** - Length of Native Hedgerow with Trees located in the north east of the site, lining a short length of the northern boundary.

Assessed as of Good condition. See condition assessment sheet for details. Assessed as of Medium strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available. Whilst Hedgerows are covered in the Kirklees Biodiversity Action Plan (BAP), Floodplain is not considered a key geographical area for this habitat type. However, this habitat offers ecological linkage to the wider environment and offers foraging and refuge opportunities for local wildlife. To be retained at condition Good, according to the AIA report (Enzygo, 2025c).

- **Species-rich Native Hedgerow with Trees – 0.138km** – Total length of Species-rich Native Hedgerow onsite. Comprised of 0.072km of Moderate condition and 0.066km of Good condition:
 - Length of Species-rich Native Hedgerow with Trees along part of the southern boundary in the east of the site. **Assessed as of Moderate condition.** See condition assessment sheet for details. Assessed as of Medium strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available. Whilst Hedgerows are covered in the Kirklees Biodiversity Action Plan (BAP), Floodplain is not considered a key geographical area for this habitat type. However, this habitat offers ecological linkage to the wider environment and offers foraging and refuge opportunities for local wildlife. To be lost to development, according to the AIA report (Enzygo, 2025c).
 - Length of Species-rich Native Hedgerow with Trees along part of the northern boundary in the west of the site. **Assessed as of Good condition.** See condition assessment sheet for details. Assessed as of Medium strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available. Whilst Hedgerows are covered in the Kirklees Biodiversity Action Plan (BAP), Floodplain is not considered a key geographical area for this habitat type. However, this habitat offers ecological linkage to the wider environment and offers foraging and refuge opportunities for local wildlife. To be retained at condition Good, according to the AIA report (Enzygo, 2025c).

6.3 Proposed Habitats Calculation

6.3.1 The proposed habitats comprise:

- **Developed Land; Sealed Surface – 0.7306ha** – comprised of 0.5656ha (proposed) and 0.165ha (retained):
 - Total area (0.5656ha) of proposed residential housing, roads, play area, paths, car park and other areas of hardstanding as shown in the Landscape Plan (CITU, 2025). **No condition assessment applicable to this habitat type.** Assessed as of Low strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available, and this habitat is not considered ecologically important or offer ecological linkage.

- Total area of access road and pedestrian path in the south of the site which is to be retained (0.165ha). **No condition assessment applicable to this habitat type.** See Section 6.2.1 of this report for details.
- **Modified Grassland – 0.372ha** - Total area of reinforced grass and lawn as shown on the Landscape Plan (CITU, 2025). Categorised here as Modified Grassland as the most appropriate habitat type. **Target condition of Moderate** deemed suitable considering the size of the site and public usage. See condition assessment sheet for details. Assessed as of Low strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available, and this habitat is not considered ecologically important or offer ecological linkage.
- **Introduced Shrub – 0.113ha** - Total area of ornamental planting as indicated in the Landscape Plan (CITU, 2025). Categorised here as Introduced Shrub as the most appropriate habitat type. **No condition assessment applicable to this habitat type.** Assessed as of Low strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available, and this habitat is not considered ecologically important or offer ecological linkage.
- **Vegetated Garden – 0.012ha** - Total area of community growing spaces, as indicated in the Landscape Plan (CITU, 2025). Categorised here as Vegetated Garden as the most appropriate habitat type. **No condition assessment applicable to this habitat type.** Assessed as of Low strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available, and this habitat is not considered ecologically important or offer ecological linkage.
- **Other Neutral Grassland - 0.0822ha** – comprised of 0.0112ha (proposed) and 0.071ha (retained):
 - Total area (0.0112ha) of wildflower planting as indicated in the Landscape Plan (CITU, 2025). Categorised here as Other Neutral Grassland as the most appropriate habitat type. **Target condition of Moderate** deemed suitable considering the size of the site and public usage. See condition assessment sheet for details. Assessed as of Medium strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available. Whilst not covered in the Kirklees Biodiversity Action Plan (BAP) due to not being a Habitat of Principal Importance (HPI), this habitat does offer ecological linkage to the wider environment and offers foraging and refuge opportunities for local wildlife.
 - Area of retained Other Neutral Grassland (0.071ha) in the west of the site. **To be retained at condition Moderate.** Section 6.2.1 of this report for details.
- **Urban Tree – 0.3421ha** – comprised of 0.2484ha (proposed) and 0.0937ha (retained):
 - Total area of 0.2484ha comprised of 61 x small trees as indicated on the Landscape Plan (CITU, 2025). **Target condition of Moderate** deemed suitable considering the site size, location, public usage of the site, and the location of some of the trees within hardstanding areas onsite. See condition assessment

sheet for details. Assessed as of Medium strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available. Whilst not covered in the Kirklees Biodiversity Action Plan (BAP) due to not being a Habitat of Principal Importance (HPI), this habitat does offer ecological linkage to the wider environment and offers foraging and refuge opportunities for local wildlife.

- Total area of 0.0937ha retained trees onsite, comprised of 4 x trees of **Good condition** (T050, T055, T056 and T061) and 1 x tree of **Moderate condition** (T062), all to be retained at baseline condition. Details taken from the AIA report (Enzygo, 2025c). See Section 6.2.1 of this report for full details.
- **Willow Scrub – 0.007ha** – Total area of existing Willow Scrub habitat, identified in the west of the site. To be retained at **condition Poor**. See Section 2.6.1. for details.
- **Unvegetated Garden – 0.12ha** - Total area of decking associated with residential housing, as indicated in the Landscape Plan (CITU, 2025). **No condition assessment applicable to this habitat type**. Assessed as of Low strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available, and this habitat is not considered ecologically important or offer ecological linkage.
- **Reedbeds – 0.0567ha** - Total area of existing Reedbed habitat, identified in the west of the site. To be retained at **condition Moderate**. See Section 2.6.1 for details.
- **Species-rich Native Hedgerow with Trees – 0.066km** – Total length of retained hedgerow in the north west of the site. To be retained at **condition Good**. See Section 6.2.1. for details.
- **Native Hedgerow with Trees – 0.0164ha** – Total length of retained Native Hedgerow. To be retained at **condition Good**. See Section 6.2.1 for details.
- **Species-rich Native Hedgerow – 0.03km** - Proposed length of Species-rich Native Hedgerow (0.03km). **Target condition of Moderate** deemed appropriate given the site location, size and public usage. See condition assessment sheet for details. Assessed as of Medium strategic significance, according to Table 8 (page 29) of the BNG Metric User Guide. No Local Nature Recovery Strategy (LNRS) for Kirklees Metropolitan Council is currently available. Whilst Hedgerows are covered in the Kirklees Biodiversity Action Plan (BAP), Floodplain is not considered a key geographical area for this habitat type. However, this habitat offers ecological linkage to the wider environment and offers foraging and refuge opportunities for local wildlife.

6.4 Results

- 6.4.1 Below is an extract from the Headline Results Tab of the completed DEFRA BNG Metric based on the above calculation, which confirms an overall anticipated **3.81% net loss** in Habitat Units and **29.49% net loss** in Hedgerow Units. In this instance, the Trading Rules have been satisfied for Very High and High Distinctiveness for habitat units, and Very High, Medium, Low and Very Low for hedgerow units.

Figure 2 -BNG Headline Results

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-0.20
	Hedgerow units	-0.73
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-3.81%
	Hedgerow units	-29.49%
	Watercourse units	0.00%
Trading rules satisfied?	No - Check Trading Summaries ▲	

Total net gain achieved is less than target set ▲

Total net gain achieved is less than target set ▲

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	5.24	5.76	0.72
Hedgerow units	10.00%	2.47	2.72	0.98
Watercourse units	10.00%	0.00	0.00	0.00

No additional watercourse units required to meet target ✓

Input errors/rule breaks present in metric ▲

7.0 Project Implementation and Construction Plan

7.1 Overview

- 7.1.1 Refer to the submitted Landscape Plan (CITU, 2025) for details of landscape planting schedules, and to the PEA (Enzygo, 2025a) for further confirmation of the relevant construction-related management and mitigation measures outlined here.

7.2 Implementation and Construction Plan

Landscape Planting Implementation

- 7.2.1 The Landscape Plan (CITU, 2025) and associated planting plans and schedule provides details of the proposed planting areas and schedules of species and numbers. It is anticipated that full details required for the ground preparation, planting requirements etc. will be secured by a suitably worded planning condition and prepared by a Landscape Architect.

Protection of Existing Features

- 7.2.2 The final site layout has been sensitively designed to incorporate the retention of the reedbed habitat and stream, and the majority of existing hedgerow and trees, which contribute to notable green and blue infrastructure and wildlife corridor function. Limited hedgerow and trees have been lost to allow for the development.
- 7.2.3 Huddersfield Narrow Canal Local Wildlife Site (LWS), River Colne and areas of Lowland Mixed Deciduous HPI all adjacent to the site, as well as Reedbed HPI and the watercourse in the west of the site will require an undeveloped protected buffer.
- 7.2.4 Throughout the construction phase, trees hedgerow and Lowland Mixed Deciduous Woodland HPI will be protected in accordance with BS5837:2012 *Trees in relation to design, demolition and construction. Recommendations*, including installing and maintaining appropriate protection fencing. All contractors are to be made aware of the purpose of the fencing, with signage used where necessary, and no works are to occur beyond this established boundary other than proposed landscape planting, including no storage of materials or machinery.
- 7.2.5 In addition, to avoid potential degradation of these habitats through excessive artificial lighting overspill, a sensitive lighting scheme shall be implemented making use of suitable products such as directional, low-level, capped, screened and/or low-lux lighting.
- 7.2.6 Assuming these protection measures and sensitive site design can be implemented, it is not considered any specific compensation for loss of habitat is necessary or justified.

Bats

- 7.2.7 The implementation above for the protection of hedgerows with trees including implementing sensitive lighting, will retain suitable habitats for foraging and commuting bats at the site. These protection measures will also minimise the risk of degradation of suitable foraging and commuting habitats for bats, ensuring any potential impacts on associated potential roosting features are avoided. The lighting scheme will be designed in accordance with the recent guidance Bats and artificial lighting at night (ILP, 2023).
- 7.2.8 Given the location and size of the site, and habitats present, it is not considered any further bat activity survey is proportionate or justified in this instance.

Badger

- 7.2.9 To minimise the risk of injury/killing of Badgers and damage/destruction of setts which could be created within the adjacent Lowland Mixed Deciduous Woodland HPI before the commencement of construction works, a pre-commencement Badger check will be conducted to ensure Badger remain absent from the site and have not colonised the site or immediate surrounds. This survey will identify any further required mitigation requirements and inform a Natural England licence application (in the unlikely event this is necessary). Due to the limited habitat onsite suitable for badgers and size of the site overall, no further specific predetermination surveys are deemed necessary to inform this assessment.
- 7.2.10 Notwithstanding the results of this pre-commencement check, as suitable habitats for Badger are present and there are records of presence in the area, this species is at risk of being harmed by construction activities if they were to enter the site. The construction phase will therefore implement a set of precautionary reasonable avoidance measures.
- 7.2.11 These RAMs are to include details of:
- Covering any holes, trenches or other excavations in which a Badger may fall into and become trapped overnight, otherwise a means of escape provided (e.g. a plank of wood);
 - If piles of soil are to be stored within the site, these will be left un-compacted and not permitted to grass over to reduce the likelihood of Badger using them for new sett excavation;
 - Any pipes between 0.1 and 0.5m in diameter must be stored with caps on to prevent Badger access; and
 - Any chemicals must be stored securely so that they cannot be accessed by inquisitive Badger accessing the site from the wider area.

Nesting Birds

- 7.2.12 To avoid an offence being committed in respect of nesting birds, site clearance including demolition will be planned to be conducted outside of the bird nesting season (March to August inclusive), where possible. If it is necessary to undertake these works during the bird nesting season, a suitably trained ECoW would supervise the clearance to ensure no active nests are affected. If any active nests are detected, an appropriate protection area around the nest(s) will be established until it can be determined that the nest is longer active.
- 7.2.13 The recommendations above for retention and protection of the Elliott's Wood located approximately 5m west of the site, and onsite mature trees and hedgerow habitats will ensure there is no significant loss of nesting habitat.

Common Reptiles and Other Priority Species

- 7.2.14 The construction phase will implement a series of best practice precautionary measures to minimise the risk of killing/injury of common reptiles and priority species during the construction phase.
- 7.2.15 Furthermore, proposed hedgerow removal will be performed in an ecologically sensitive manner, undertaken by an ECoW. In each instance, an ecologist will check any potential habitats/refugia immediately prior to clearance. Vegetation will be cut/felled to a height of

0.15m to encourage any wildlife present to move outside of the working area. The cut habitats and any remaining refugia habitats will be checked again by an ECoW prior to stripping any stumps or topsoil.

- 7.2.16 Considering the limited suitable habitat onsite, and potential for individual numbers of common reptiles, it is considered no further detailed Reptile Survey is proportionate or justified.

Great Crested Newt

- 7.2.17 Implement best practice precautionary measures to minimise the risk of accidental injury/killing of any GCN found during the construction phase. If any GCN's are found during the construction phase, work shall immediately cease in the area, and an ecologist should be contacted for advice on the appropriate actions.
- 7.2.18 Considering the notably low risk of GCN presence and associated killing/injury during construction, it is not considered any further predetermination survey or Natural England licensing is proportionate or justified in this instance.

7.3 Additional Enhancements

- 7.3.1 The specified additional enhancements, comprising bird/bat boxes, should be installed during the construction phase. An Ecologist can advise on suitable locations on Site for these features (e.g. identified suitable trees for boxes).

7.4 Construction handover checklist

- 7.4.1 A Construction Handover Checklist shall be produced by the Main Contractor which confirms that each of the above-described activities/measures has been completed in accordance with this document. The below works schedule can be used as the basis for this checklist, with notes added as appropriate when works have been undertaken. This checklist shall be provided to the Client on completion of the construction phase.

7.5 Timetable for Implementation

- 7.5.1 The mitigation and enhancements will be undertaken in accordance with the proposed programme of works. The programme takes into account: seasonal constraints, the expected timetable of works (i.e. when site clearance needs to be undertaken, and when construction works are due to commence), and any other timing considerations.

Table 7.1: Works Schedule

Recommendation	2025 -2027											
	J	F	M	A	M	J	J	A	S	O	N	D
Installation and maintenance of protection fencing and signage (prior to commencement of works and throughout)												
Implementation of pollution prevention guidance and sensitive lighting (throughout the construction phase)												
ECoW supervision of vegetation clearance (including nesting bird checks where required)												
Implementation of GCN and Badger RAMs (throughout the construction phase)												
New planting including tree, hedgerow and shrubs (in accordance with Landscape Architect guidance)												
New grassland seeding (in accordance with Landscape Architect guidance)												
Additional Enhancement Installation (i.e. Bird/Bat Boxes)												

7.6 Those responsible

General

- 7.6.1 Prior to the commencement of works on site, including the setting up of Site compounds and access onto the Site, the main contractor (and any personnel appointed by the main contractor) will receive a formal briefing by the main Ecologist or their appointed representative. This briefing will detail all relevant protected species issues as set out within this document.
- 7.6.2 The main contractor will be responsible for relaying any necessary information to contractors on Site, either employed by them directly or third parties. Advice should be sought from Enzygo's Director of Ecology in the event of complex issues arising or in cases where there is any doubt as to the action to be taken. Deviation from this document will only be undertaken upon written agreement with Enzygo.

Contact Details

7.6.3 Details of each party are as follows:

- Main Ecologist/point of contact – Derek Allan, Director of Ecology c/o Enzygo Ltd.: 01454 269237 derek.allan@enzygo.com,
- Ecological Clerk of Works (ECoW) – TBC c/o Enzygo Ltd.,
- Main Contractor/point of contact – TBC by CS District Ltd.and,
- Site Manager – TBC by CS District Ltd.

7.6.4 The Principal Contractor for these works is to be confirmed, who will be responsible for ensuring that all works are undertaken in accordance with the Construction (Design and Management) Regulations 2015 (CITB, 2016).

Role of Client/Third Party Contractors

- 7.6.5 The developer or a third party employed to undertake specific services, will be responsible for implementing all of the aforementioned avoidance, mitigation and enhancement measures. These will proceed under ecological supervision where relevant.

Role of Ecological Clerk of Works

- 7.6.6 A suitably qualified and experienced ecologist, licensed/accredited where necessary, will be provided and act as an ECoW. The role of the ECoW is in accordance with BS42020:2013 (BSI, 2013) and will satisfy the following requirement:

'An ecological clerk of works should be able to demonstrate a level of experience and competence commensurate with the complexity of the role needed on Site to deal with the wide range of ecological issues likely to be encountered and to adapt to new and unforeseen challenges raised by development activities'.

8.0 BNG Management and Monitoring Plan

8.1 Introduction

- 8.1.1 In accordance with *Biodiversity Net Gain: Good Practice principles for development* (CIEEM, CIRIA, IEMA, 2016) a long-term habitat management should be secured for the “lifetime of the development” which translates to a 30-year period. A Biodiversity Net Gain Management and Monitoring Plan (BNG MMP) would typically provide detailed management and maintenance information for years 1 – 5 and with broader management aims for the lifetime of the BNG commitment (e.g. the lifetime of the project impacts or 30 years).
- 8.1.2 The below management measures are applicable to those habitats which will lie in areas of public open space and which are to be managed by the appointed Management Company. It is confirmed there are no specific private garden areas under ownership of the new residents.

8.2 Management Measures

Urban Trees – Target Condition Moderate (proposed) and Good and Moderate (retained)

Species-rich Native Hedgerow with Trees – Condition Good (retained)

Native Hedgerow with Trees – Condition Good (retained)

Species-rich Native Hedgerow – Target Condition Moderate (proposed)

- 8.2.1 Management activities for urban trees follow best practice management (or as recommended by an Arboriculturalist where applicable) and will ensure urban trees achieve Moderate condition for newly planted trees, and maintain Good/Moderate condition for retained trees. These features shall be managed to minimise and avoid adverse factors, such as herbicide and severe pruning, and promote positive features such as healthy trees reaching maturity, lack of invasives, and lack of damage.
- 8.2.2 Any cutting/trimming shall take place outside of the nesting bird season (which is from March to August inclusive) to avoid any disturbance or potentially killing/injury of active nesting birds.
- 8.2.3 Tree areas to be maintained weed-free throughout the growing season and all litter and other debris should also be removed.
- 8.2.4 If Herbicide required (only for pernicious weeds or invasive schedule 9 species) this should be non-residual and implemented by suitably qualified individuals in line with all current standards and regulations. Mulching (PAS100 compost or similar) should be the default option for Weed control. No invasive flora species permitted to establish.
- 8.2.5 Regular inspection for damaged, diseased, or otherwise failed growth of trees with subsequent removal and replacement as needed. Any dead or failing specimens should be removed and replaced during the next available planting season. Trees guards and stakes are also to be checked and adjusted/replaced as required, and then removed once successful establishment confirmed.
- 8.2.6 Mulch is to be topped up annually in spring and/or autumn, and inspections to determine if aeration of compacted soils is required. The base of new trees to be watered during prolonged periods of dry hot weather, particularly in the first year whilst establishing.
- 8.2.7 Species-rich hedgerow sides will be cut every 3 years and tops will be trimmed every 6 years. Trees and shrubs shall be cut as required to maintain the health of the specimen and/or when

encroaching into areas where not wanted (such as over footpaths, doorways etc.). All arisings to be chipped and spread on Site and/or used as mulch to base of shrubs and trees.

8.2.8 Where practicable, traditional methods of hedgerow management such as hand-trimming and coppicing, will be utilised. Traditional management is important in the habitat context, so that the hedgerow is not too open in structure as this lowers their value as habitat and as dispersal mechanisms for wildlife. General hedgerow management practise will aim to benefit hedgerow biodiversity. This will be achieved using some, and where appropriate, all of the following techniques (adapted from English Nature, 2002). There should be sufficient access to all hedgerows to allow implementation of this management:

- At points where hedgerows link to roads/footpaths they will be left to grow higher (where this does not obstruct sight lines or compromise safety) to encourage wildlife to fly higher and over any gaps;
- Where practicable, coppicing or laying should be used to manage hedgerows that become gappy or lack dense branches at their base. Where this is not possible, reciprocating bar cutters or flailing should be undertaken on a rotational basis so that some heavily fruiting structures are always present. Where possible, only a small proportion of the total length of a hedge should be managed at any one time;
- If the size of a hedgerow needs to be restricted, one side will be cut, leaving the other side and the top of the hedgerow uncut;
- Reciprocating bar cutters will be used where there are larger sections of hedgerows, which need to be cut, such as along roadsides;
- Hedges will be trimmed to 'A shaped' or 'topped A shaped', which improves hedge viability and potential for wildlife;
- Hedgerow management will, where possible, to be carried out in January and February, to ensure a healthy supply of winter berries for foraging birds is provided and that activities are completed prior to the start of the bird nesting season in March; and,
- Where damage to hedgerow has occurred, and/or dying back of trees/shrubs, as soon as possible in the next planting season

8.2.9 The longer the period between management, the more dramatic the management may have to be, but the greater the range of niches supported in the meantime. Lengthening the time between hedge cutting can enhance the foraging resource by increasing the production of hard and soft mast. Traditional management techniques will act to create a gradual transition from hedgerow to grassland via scrambling vegetation, creating width and varied structure, which provides a greater availability of habitats, food and refuge. The use of chemicals near to hedgerows and adjacent areas of vegetation will be avoided where possible to prevent loss of species richness of the hedgerows.

Other Neutral Grassland – Target Condition Moderate (proposed and retained)

Modified Grassland – Target Condition Moderate (proposed)

8.2.10 The meadow grassland areas are to be managed to achieve a target condition of Moderate condition, providing a floristically diverse habitat, with a varied sward, areas of bare ground, and an absence of Bracken and self-seeded shrubs, absence of invasive flora and little cover of undesirable species. The habitat will also contribute to habitat connectivity and wildlife corridor

function and provide high-value habitat for wildlife, including small mammals, foraging birds and bats, and invertebrates.

- 8.2.11 During the first year after sowing, grassland to be cut regularly to a height of 40-60mm starting in spring (late-March to early-May) to control fast-growing grasses, promote desired slower growing wildflowers, and to minimise the establishment and successful seeding of noxious weeds. Arisings to be removed to ensure a damaging mulch of decomposing grasses is not left which would hinder growth.
- 8.2.12 From the second year onwards, grassland to have a single annual 'hay cut' in late summer to a height of 40-60mm. This will promote a tall, tussocky grassland sward which is floristically diverse. The grass cuttings to be left for a minimum of one week to allow for seed dispersal, followed by either removal from site or made into compost piles (which would serve as hibernacula for wildlife and potential egg-laying habitat for Grass Snake).
- 8.2.13 These cutting activities are also to remove any self-seeded saplings and the grassland is to be monitored to ensure no single undesired species (e.g. Bramble, Common Nettle, Bracken etc.) establish, with additional efforts to cut back and control if necessary.
- 8.2.14 This cutting will allow establishment and maintenance of localised bare ground areas (between 1-5% cover) in order to provide enhanced opportunities for a range of wildlife including invertebrates.
- 8.2.15 The monitoring is also required to ensure no invasive flora (as listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)) establish, with subsequent removal or treatment and required.

Reedbed – Condition Moderate (retained)

- 8.2.16 The low turbidity of the water supplying the reedbed habitat is to be maintained, with no obvious signs of pollution.
- 8.2.17 The cover of scrub and scattered trees within the habitat to be <10% of the total habitat area. Cut back of vegetation as required to ensure undesirable species do not establish.
- 8.2.18 The cover of bare ground to be <5% of the total habitat area.
- 8.2.19 An absence of invasive non-native plant species is to be maintained, with species indicative of suboptimal condition (e.g. Common Nettle) making up <5% of the total habitat area.

Maintain a diverse vegetation structure within the habitat, with between 60-90% cover of Common Reed (*Phragmites australis*) overall.

Willow Scrub – Condition Poor (retained)

- 8.2.20 An absence of invasive non-native plant species is to be maintained, with species indicative of suboptimal condition (e.g. Cherry Laurel (*Prunus laurocerasus*), American Skunk Cabbage (*Lysichiton americanus*), Buddleia (*Buddleja davidii*), Cotoneaster (*Cotoneaster* spp.), Spanish Bluebell (*Hyacinthoides hispanica*), Hybrid Bluebell (*Hyacinthoides non-scripta* x *hispanica*)) making up <5% of total habitat area.

8.3 Monitoring

- 8.3.1 The BNG Management and Monitoring Plan (MMP) will be reviewed annually and updated accordingly to take account of any changes to management prescriptions and identify any contingencies/remedial action accordingly. This review will ensure that the identified habitat target conditions are achieved.
- 8.3.2 At least an annual inspection will be undertaken of all habitats on-site, with any incidents or damage reported as soon as this is noticed and remedied at the earliest positive opportunity (e.g. replacement planting at the next planting season).
- 8.3.3 No specific monitoring is required in respect of any protected or notable species.
- 8.3.4 A BNG Audit Report should be produced to provide an audit checklist confirming the delivery of BNG at project completion in accordance with current guidance (CIEEM, 2021).

8.4 Roles & Responsibilities

- 8.4.1 CS District Ltd. (the developer) will be responsible for appointing a suitably experienced and competent Management Company who will be made responsible for implementing actions within this management plan. As required, the appointed Management Company will employ specialist contractors to undertake specified tasks.

8.5 Legal & Financial

- 8.5.1 The planning requirements associated with provision of a BNG MMP and associated DEFRA Metric ties the Client into the provision of the management and monitoring stipulated here.

9.0 References

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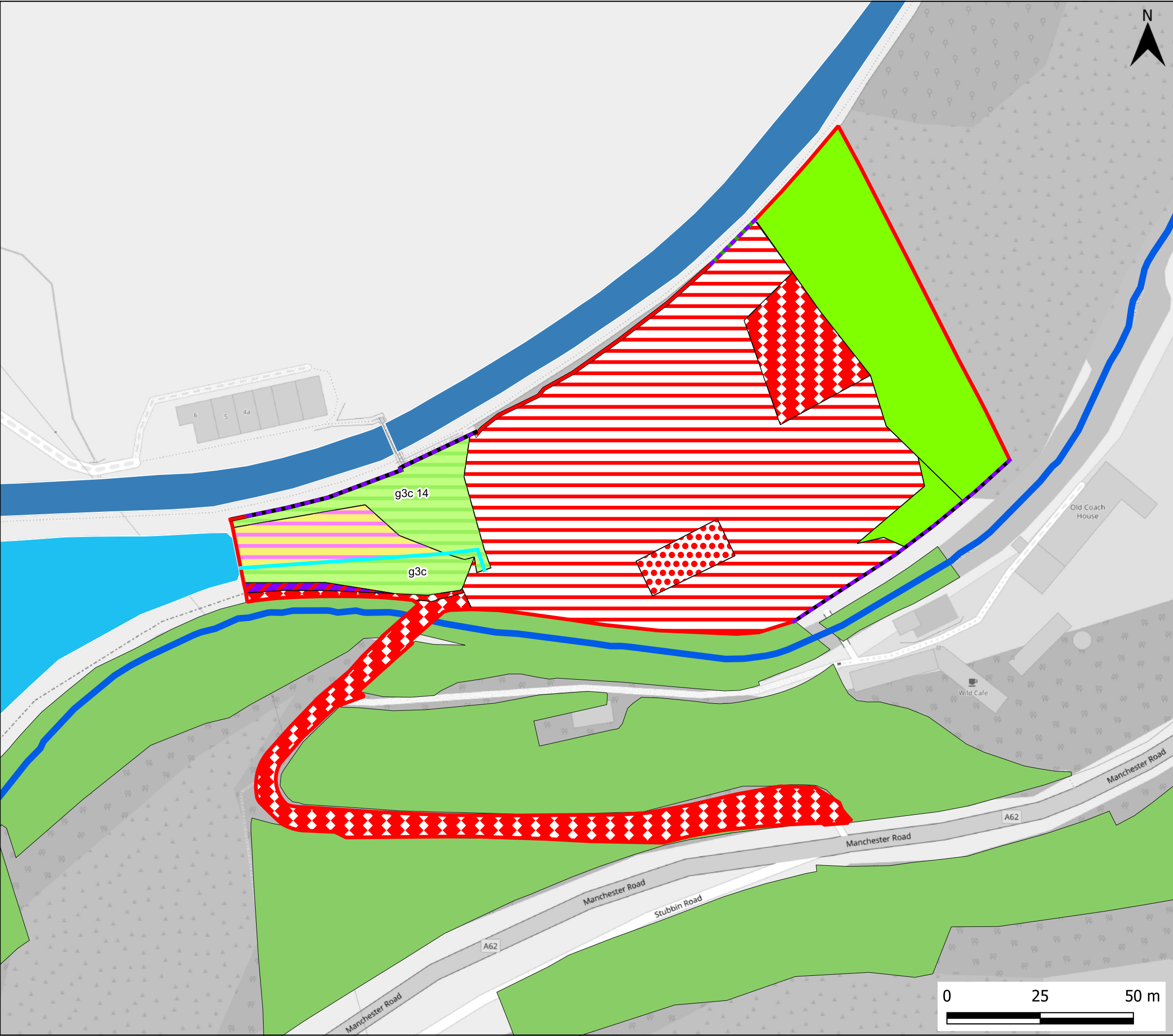
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Drawing – UK Habitat Classification Plan



- Key:**
- Redline Boundary
 - Culvert (u1 851)
 - Built linear features (u1e)
 - Other rivers and streams (r2b)
 - Species-rich native hedgerow with trees (h2a5 11)
 - Other native hedgerow with trees (h2a6)
 - Reedbeds (f2e)
 - Other neutral grassland (g3c)
 - Other neutral grassland with scattered rushes (g3c 14)
 - Modified grassland (g4)
 - Willow scrub (h3j)
 - Buildings (u1b5)
 - Other developed land (u1b6)
 - Vacant or derelict land (u1f)
 - Cellars Clough Reservoir
 - Lowland Mixed Deciduous Woodland Habitat of Principal Importance
 - Huddersfield Narrow Canal Local Wildlife Site (LWS)
 - River Colne

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P02	11/08/25	Areas updated	LW	KS	KS
P01	02/07/2025	Preliminary Issue	SD	KS	KS

Project
Marsden Island

Client
Citu Group Developments

Drawing Title
UK Habitat Classifications Map

Scale	Date	Status
1:1000 @ A3	11/08/2025	Preliminary

DWG No.	Revision
SHF9022001-ENZ-XX-XX-DR-Z-0001	P02

Bristol 01454 269 237	Cardiff 02920 023 700
Manchester 0161 413 6444	Cambridge 01799 542 473
Sheffield 0114 321 5151	Belfast 07377673948

 hello@enzygo.com

Appendix A – Landscape Plan

landscape materials key

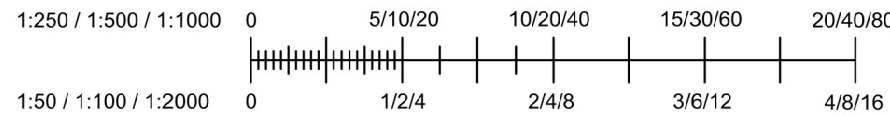
- gravel reinforced system
 - resin bound system
 - grass reinforced system
 - grassed lawn
 - ornamental planting - mix of perennials, grasses and shrubs
 - wildflower planting
 - native hedgerow low height
 - community growing spaces
 - decking
 - new trees - native british
- Sandhill Cottages



landscape plan

WIP 19.0.25

REVISIONS



Drawing Number
ML-CITU-PP013
Title
landscape plan

Scale @ A1 Revised by Rev

1:250
Drawn SM Reviewed SN Sheet Created 19/09/25

Pipeline
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PLANNING

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