Brindle &Green

Biodiversity Impact Assessment

Chestnut Avenue, Riddings, Derbyshire

Report Reference: BG25.202

July 2025

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1 Summary

1.1.1 Where a development has an impact on biodiversity, Biodiversity Net Gain encourages developers to secure an increase in appropriate natural habitat and ecological features over and above that being affected. In order to determine whether there is no net loss or a net gain to biodiversity from a development project, a quantitative approach involving the use of a metric is required. In England, biodiversity net gain is required under a statutory framework introduced by Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021). This statutory framework is referred to as 'Biodiversity Net Gain' in Planning Practice Guidance to distinguish it from other or more general biodiversity gains (gov.co.uk, 2025).

1.1.2 This Biodiversity Impact Assessment (BIA) draws upon the baseline results of the ecological walkover undertaken by Dave Judson, Consultant Ecologist on the 2nd of April 2025 and the 16th of June 2025. This assessment includes the results of biodiversity value calculations, derived using the DEFRA Statutory Biodiversity Metric Calculator, based upon the design proposals for the survey area found in Appendix 1.

1.1.3 The development proposals are for a full planning application for two easement areas associated with the adjacent development (reference AVA/2019/0520), which is for the development of 53 dwellings. The two easements associated with this application will be for foul sewage (running through W1) and surface water easement (running through W2). The easements will consist of underground piping of 150mm diameter, laid at a depth of 1.5m which will outflow into existing ditches (D1 and D2). The proposals will see the removal of two sections of woodland (W1 and W2) and is anticipated to undercut stream D3, which will be unimpacted.

1.1.4 Using the Statutory Biodiversity metric, the existing habitats within the application boundary were valued at 0.42 'Habitat Units', and 0.60 'Watercourse Units'. No irreplaceable habitat, or hedgerows are present on site. In order to provide a net gain, offsite woodland (W3) is to be enhanced from its current condition of 'Poor' to a target condition of 'Moderate' resulting in an uplift from 0.60 'Habitat Units' to 1.02 'Habitat Units' (+70.03%). Woodland lost within the site will be replaced with species-rich grassland with a target condition of 'Good'. As a result, the proposals will see an overall gain of 0.32 'Habitat Units' (+76.85%) and no net change to 'Watercourse Units'. Trading rules have been satisfied for 'Habitat Units'. As there has been no net change to 'Watercourse Units' the calculations derived from this assessment do not meet

the statutory 10% net gain requirement as set out within Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021).

1.1.5 As the results derived from the calculation do not meet the mandatory 10% net gain requirement. The client seeks to offset the unit shortfall through purchase of offsite credits from a third party provider. The unit shortfall can be found in the accompanying metric.

1.1.6 The report should be reviewed in conjunction with the accompanying Metric (BG25.202 Chestnut Avenue, Riddings - Biodiversity Net Gain Metric FINAL).

2 Introduction

2.1.1 Brindle and Green Ltd were commissioned by Langridge Homes to undertake a Biodiversity Impact Assessment (BIA) at the site known as Chestnut Avenue, Riddings, Derbyshire. This report provides an appraisal of the biodiversity value associated with the existing habitats established during the baseline survey and assesses the impacts in terms of biodiversity loss against the proposed layout (Appendix 1) using the Statutory Metric (DEFRA, 2024) which is considered the most up to date method for assessing impact to biodiversity.

2.1.2 This report has been produced in order to provide insight on the potential impacts of the full planning application for the proposed easement works associated with the Reserved Matters planning application for 53 dwellings (all matters reserved except access) at Development at Chestnut Avenue Riddings (reference AVA/2019/0520). This report also highlights appropriate mitigation and enhancements required in order to avoid a net loss in Biodiversity value, and to achieve the national target of an overall net gain of at least 10% in Biodiversity value.

2.1.3 The survey areas pertain to two small sections of woodland which are present to the northeast (W1) and south (W2) of the wider application site (shown within the Blue Line Boundary, at Appendix 2). The two survey areas have an approximate combined area of 0.07ha and are located on the southern extent of the town of Riddings, a suburb associated with Alfreton, Derbyshire. In addition to the woodland, two dry ditches are located within 5m of W1 (D1), and W2 (D2), and a short stream (D3) runs through W1 and extends beyond the survey area. It should be noted that both D1 and D2 were dry during both survey visits, and are expected to remain dry for more than four months of the year. As a result, these features have not been considered further within this report or accompanying metric. Both survey areas consist of Other Woodland; Broadleaved. The surrounding landscape to the northwest is dominated by existing development associated with the town of Riddings. Woodland is immediately adjacent to the northeast, east, south and west of the survey areas, beyond which is arable land.

2.1.4 It is anticipated that both survey areas will be lost to facilitate the proposed foul water and surface water easement, resulting in a loss of approximately 0.07ha of woodland. However, it is understood that there is scope to offset any losses to woodland through enhancing additional woodland which surrounds the site. In addition, while woodland cannot be reinstated due to the proposed underground piping associated with the easement works, species-rich grassland is

proposed within both survey areas post development in order to mitigate part of the loss of this habitat.

2.1.5 Results and recommendations contained within this report have been prepared by an experienced ecologist and are therefore the view of Brindle & Green Limited. The results of the Biodiversity Impact Assessment are based on information provided by our client and ecological surveys undertaken on the 2nd of April and the 10th of June 2025. This report pertains to this information only.

2.1.6 This report has been complied in accordance with local policies. It should be noted that the (Amber Valley Borough Local Plan (Adopted 2006)), and national policies to guide the scheme on how to achieve the targets set out within Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021).

3 Methodology

3.1 Biodiversity Metric

3.1.1 The biodiversity accounting system is underpinned by a metric that calculates the ecological value of both development impact and habitat restoration/creation. The statutory Biodiversity Metric was built upon a series of previous versions developed in collaboration with Natural England, the Environment Agency and the Forestry Commission, including authors and contributors cited in previous versions. The Biodiversity Metric calculations must be undertaken following the below rules. If they are not followed, then a biodiversity net gain cannot be claimed.

- **Rule 1**: The trading rules of this biodiversity metric must be followed.
- **Rule 2**: Biodiversity Unit Outputs, for each type of unit, must not be summed traded, or converted between types. The requirement to deliver a 10% net gain applies to each type of unit.
- **Rule 3**: The calculations must be undertaken using the statutory metric calculation tool or small sites metric tool (for small sites).
- **Rule 4**: in exceptional ecological circumstances, deviation from this biodiversity metric methodology may be permitted by the relevant planning authority (refer to The Statutory Metric User Guide on applications of Rule 4).

3.1.2 The metric is based on an assessment of habitat type and condition. Habitat types are classified into five bands of 'distinctiveness' which are:

- **Very High:** Priority habitats that are rare and threatened and require conservation action
- **High**: Priority habitats
- **Medium**: Semi-natural habitats that are not priority habitats
- **Low**: Habitat of low biodiversity value
- **Very low**: Habitats with little or no biodiversity value

3.1.3 Compensation arrangements must be like-for-like or better, i.e. the loss of semi-natural habitats can only be compensated for through the creation of priority or other semi-natural habitats, not through creation of lesser quality habitat. 'Trading up' options allow for the loss of poor-quality habitat, such as farmland, to be compensated for with the creation of high-quality habitat.

3.1.4 The ecological value of the habitat lost to development is a function of its distinctiveness, its condition and the area lost – scores are assigned to all three variables and multiplied together to arrive at the number of units lost. To compensate for a loss; habitat creation in the scheme must be delivered to produce sufficient units to meet the mandatory 10% net gain. where a 10% net gain cannot be achieved within the application site, habitat creation/enhancement will be used within wider ownership to meet the statutory requirement. Where this cannot be achieved then purchase of biodiversity credits through a third part provider is considered.

3.1.5 The number of credits delivered by the compensation receptor sites are also a function of the type, condition and area of the habitat being created or restored. But additionally, there are a further range of 'multipliers' applied to the creation of habitat because there are a number of risks to take account of – spatial, temporal and delivery.

3.1.6 Linear habitats (such as hedgerows) and River Habitats (such as wet ditches, streams) are measured separately to the rest of the site habitats and included within a separate section – hedge baseline and hedge creation, river baseline and river creation. The aim is to achieve a 10% net-gain for river units as well as for biodiversity units.

3.1.7 Where an application site borders or is situated within 10m of a watercourse, a specific river condition assessment has been carried out by a suitably qualified ecologist. The river condition assessment comprises a Modular River physical (MoRPh) survey using the MoRPh survey methodologies (Modular River Survey, 2024). The aim of the MoRPh survey is to characterise local physical habitat within a sub reach which is associated with the application boundary. A MoRPh survey starts upstream, capturing data from each bank top, bank face and the channel bed. The diagram in Figure 1 below defines the terminology used within a river condition assessment. The river condition assessment was conducted from the both banks of D3 for all modules (modules 1 – 5).

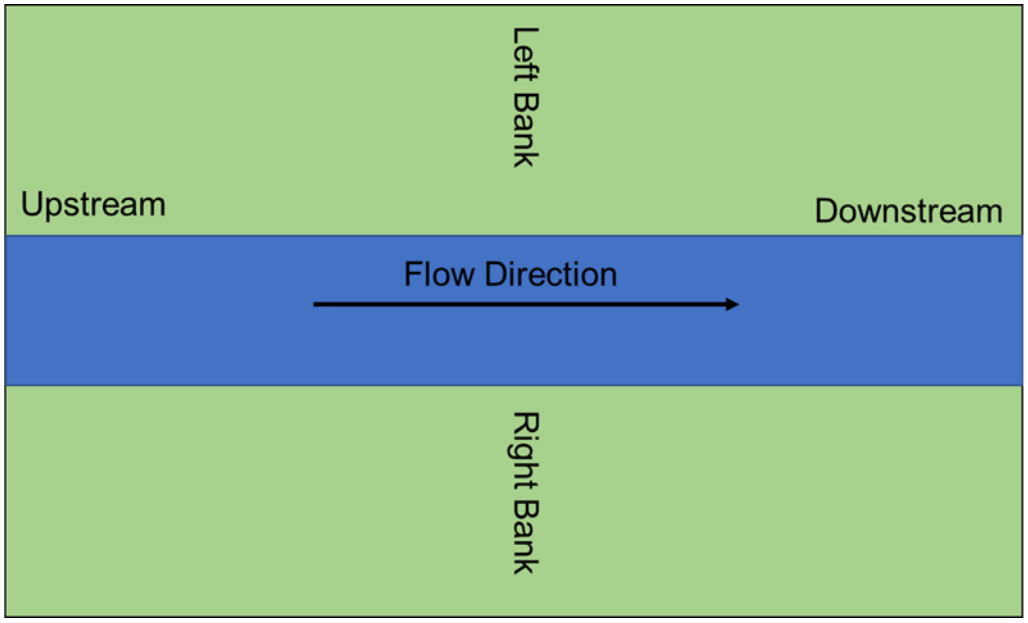


Figure 1: Diagram showing definitions of left bank and right bank under MoRPh survey methodology.

3.1.8 Where proposed creation/enhancement of habitat is of medium distinctiveness or above then a Habitat Management and Monitoring Plan (HMMP) must be produced to detail how these areas are to be maintained to achieve their target criteria and secure their longevity.

3.2 Metric Publish Date

3.2.1 The version of Statutory Metric used for this assessment was published on 23/07/2024.

3.3 Desk Study

3.3.1 A desk study utilising Local Nature Recover Strategies or publications within the local plan (Adopted Amber Valley Borough Local Plan 2006) as well as open-source special data available from Multi Agency Geographic Information for the countryside (MAGIC) was searched to determine the strategic significance of the site.

3.3.2 A search of the national priority river habitat database (Natural England, 2017) and publications within the LPA was accessed to determine strategic significance for rivers.

3.4 Field Survey

Habitat Baseline Condition Assessment

3.4.1 A preliminary ecological appraisal was undertaken by Brindle and Green Ltd which included a habitat baseline condition assessment using the Statutory Condition Assessment Sheets.

3.4.2 The baseline condition assessment was undertaken on the 2nd of April by Dave Judson MSc, Consultant Ecologist.

3.4.3 A MoRPh survey was undertaken on 10th of June 2025 by Dave Judson MSc, Consultant Ecologist who is a MoRPh accredited surveyor, with the assistance of Harry Ridgeway MSc, Seasonal Ecologist.

3.5 Mapping and Assessment

3.5.1 Habitats, and watercourses were mapped within QGIS software to allow area calculations. Geometry was extracted from the polygons and lines drawn on the baseline plan and entered into the metric with their respected condition assessment. Individual trees are mapped as points and their areas are either calculated using the tree helper in the Metric informed by their diameter at breast height or calculated root protection area informed by a BS5837 report.

3.5.2 The proposed scheme was georeferenced over the baseline map to determine extent of development and assess habitat retention/loss/potential enhancement areas. Where available; CAD drawings may be directly imported to QGIS to allow for calculations.

3.5.3 A series of points, polygons and lines were drawn over the proposed plans and classified by their target habitat type and condition with their geometries extracted and entered into the habitat creation or habitat enhancement tabs of the metric.

3.5.4 The data from the MoRPh survey was uploaded onto the online workspace cartographer. In combination of a desk-based assessment through the workspace to attain river type. Cartographer then produces an excel spreadsheet output of the condition assessment of the watercourse. The condition assessment is then checked by the accredited ecologist who will review against the Guide to Assessing River Condition (Gurnell *et al*, 2024) prior to inputting the overall condition of the length of river that spans through the site/within 10m of the site into the metric.

3.6 Limitations

3.6.1 It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment.

3.6.2 Georeferencing does not provide an exact measurement of the elements of the proposed scheme. However, the metric rounds the area calculations to 2 decimals to be as accurate as possible.

3.6.3 The initial baseline assessment was undertaken outside of the optimal botanical window (May - August). However, updated botanical assessment was made during the subsequent MoRPh survey, which was undertaken during the optimal period.

4 Results

4.1 Baseline Condition Assessment

4.1.1 The survey areas comprise two small parcels of Other Woodland; Broadleaved (W1 and W2), which extend outside of the survey area. Distinctiveness of these habitats are 'Medium'. The stream (D3), which runs through W1 and extends beyond into the wider woodland is of 'High' distinctiveness. A summary of the baseline condition assessment can be found in Table 2 below with a map of the baseline habitats in Appendix 2. Full details of the baseline assessment can be found within the accompanying metric (BG25.202 Chestnut Avenue, Riddings - Biodiversity Net Gain Metric FINAL). No habitats within the application site met the criteria for irreplaceable habitat due to the absence of any veteran and ancient trees, and the current condition of both woodland parcels.

4.2 Scheme Design and Biodiversity Net Gain Principles

4.2.1 The progression of the layout has been informed by the baseline calculations and habitat creation/enhancement has been guided to maximise biodiversity potential on site.

Retained/Enhanced Habitat

4.2.2 D3 is to be retained in its entirety as the proposed underground foul water easement is to undercut this feature. As D3 is already in 'Fairly Good' condition, it is not considered possible for this feature to be further enhanced.

4.2.3 It is not possible to retain any of the woodland within the survey areas (shown within the red line boundary), nor is it possible to reinstate new woodland as underground piping is required, which will run through the survey areas. Instead, species-rich grassland is to replace the lost woodland parcels. In addition, in order to offset losses required to facilitate the proposals, approximately 0.15ha of woodland within the wider ownership boundary (shown within the blue line boundary) is to be enhanced from 'Poor' condition to 'Moderate' condition.

Habitat Loss

4.2.4 Due to the nature of the proposals, neither W1 nor W2 can be retained. As a result, the scheme will see the loss of approximately 0.07ha of Other Woodland; Broadleaved.

Table 1: Summary of condition assessment for habitat, and river baseline for Chestnut Avenue, Riddings.

Habitat and Area/Length	Habitat Parcel Ref	Distinctiveness	Condition	Reason
Other Woodland; Broadleaved (0.036ha)	W1	Medium	Moderate	Parcel of woodland scores a total of 32/39 points under the woodland condition assessment sheet. Parcel lacks any significant shrub layer, supports no veteran specimens, contains a significant amount of non-native species, namely sycamore (*Acer pseudoplatanus*), and contains fewer than five native tree or shrub species within the surveyed area.
Other Woodland; Broadleaved (0.033)	W2	Medium	Poor	Parcel of woodland scores a total of 24/39 points under the woodland condition assessment sheet. Parcel contains fewer than five native tree or shrub species, and is largely dominated by non-native species, namely sycamore. Further, parcel shows little sign of natural regeneration, and no recognisable woodland NVC plant community at the ground layer. Parcel also includes significant amount of rhododendron (*Rhododendron sp.*,), which is non-native and invasive.
Other Woodland; Broadleaved (0.15ha)	W3	Medium	Poor	Parcel of woodland associated with W2 but extends beyond the survey area. Recorded as having a condition score of 24/39 points in line with W2. Parcel has low species diversity, with poor ground flora and little sign of natural regeneration. In addition, parcel contains a significant amount of rhododendron.
River	**Habitat Parcel Ref**	**Distinctiveness**	**Condition**	**Reason**
Other Rivers and Streams	D3	High	Fairly Good	Stream supports a number of features such as varying bank profiles, steps, and pools which are considered to be desirable features within streams. Stream lacks much emergent or marginal vegetation, but given its location within woodland, bank top supports a range of shrub, tree, and herbaceous species. Stream assessed to have condition score of 1.526.

Table 2: Summary Post Development Habitats for Chestnut Avenue, Riddings.

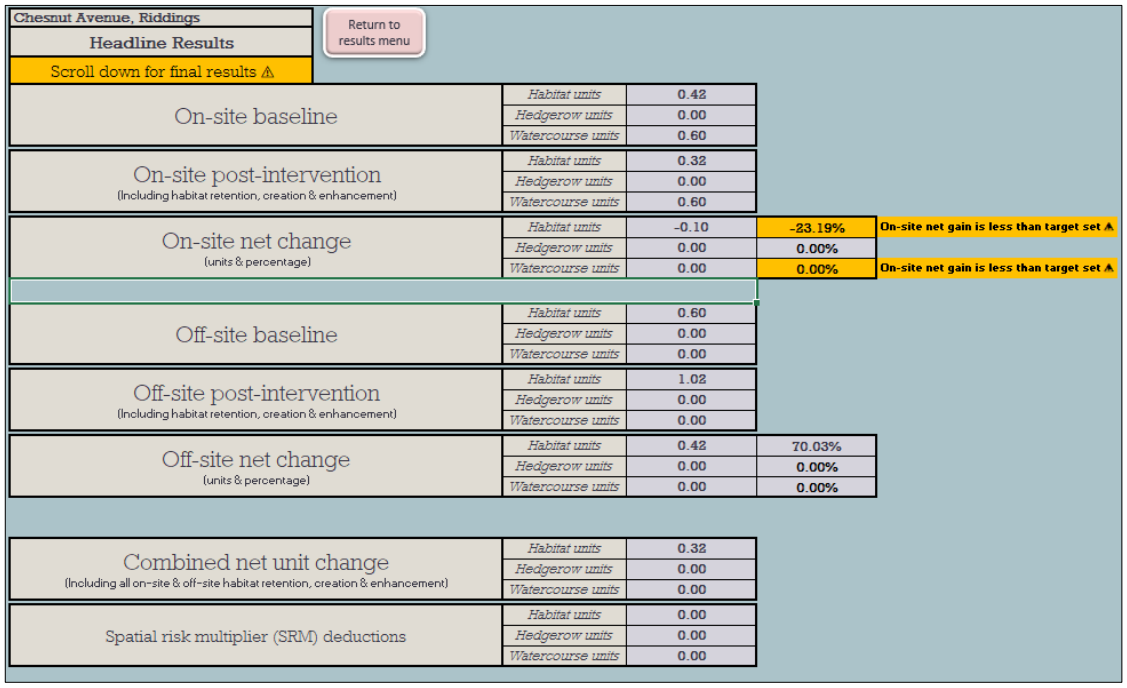
Habitat and Area/Length	Habitat Parcel Ref	Distinctiveness	Condition	Reason
Other Woodland; Broadleaved (0.15ha)	W3	Medium	Moderate	Existing area of woodland surrounding W2 is to be enhanced from 'Poor' condition to 'Moderate' condition through targeting the removal of undesirable rhododendron, re-seeding ground layer with suitable seed mix such as EW1 (or similar approved), in addition to selective thinning, and coppicing where appropriate to encourage new growth and planting of a range of native species to improve diversity. Through appropriate management it is considered that the enhanced woodland can reach a target condition of 'Moderate' and achieve a score of 32/39 points under the woodland condition assessment sheet.
Modified Grassland (0.069ha)	G1	Low	Good	Areas of woodland (W1, and W2) which are to be lost are to be replaced with species-rich modified grassland managed to ensure species-diversity, and diversity in sward height. Management will also see the removal of undesirable species. Target criteria are criteria A, C, D, E, F and G. Habitat may fail criterion B.

4.3 Biodiversity Metric Calculator Results

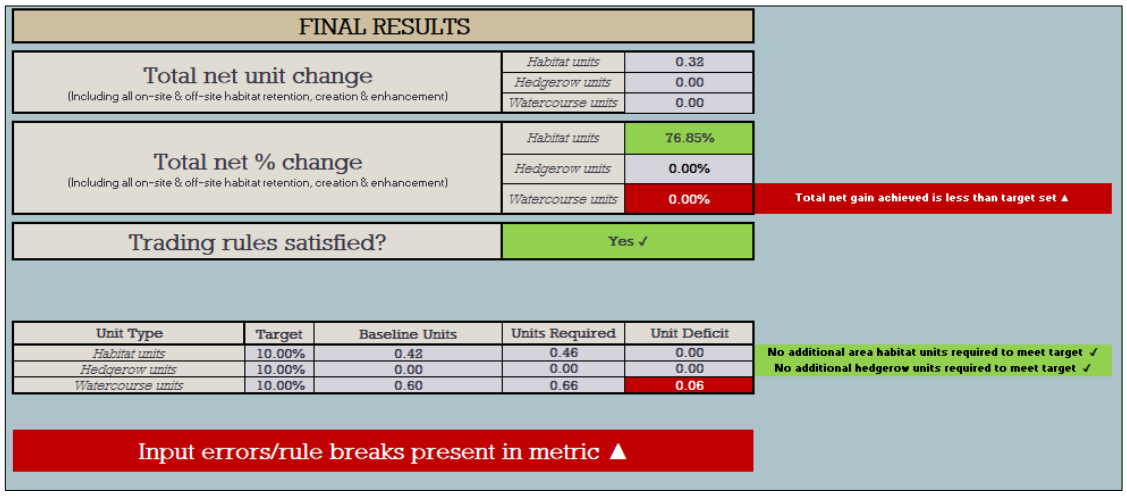
4.3.1 Table 2 below provides a headline summary of the calculations derived from the statutory metric.

4.3.2 When considering the offsite enhancements, the scheme has achieved a net gain of 0.32 'Habitat Units' (+76.85%), with no net change to 'Watercourse Units'. Under the current proposals trading rules have been satisfied for 'Habitat Units', but as no net change has been made to 'Watercourse Units', there is a unit deficit of 0.06 'Watercourse Units'.

Table 3: Biodiversity Impact Assessment Score, Scheme with Ecological Enhancements



Chesnut Avenue, Riddings – Headline Results				
Scroll down for final results ⚠	Return to results menu			
On-site baseline	Habitat units	0.42		
	Hedgerow units	0.00		
	Watercourse units	0.60		
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.32		
	Hedgerow units	0.00		
	Watercourse units	0.60		
On-site net change (units & percentage)	Habitat units	-0.10	-23.19%	On-site net gain is less than target set ▲
	Hedgerow units	0.00	0.00%	
	Watercourse units	0.00	0.00%	On-site net gain is less than target set ▲
Off-site baseline	Habitat units	0.60		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	1.02		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site net change (units & percentage)	Habitat units	0.42	70.03%	
	Hedgerow units	0.00	0.00%	
	Watercourse units	0.00	0.00%	
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.32		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Spatial risk multiplier (SRM) deductions	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		



FINAL RESULTS			
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.32	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	76.85%	
	Hedgerow units	0.00%	
	Watercourse units	0.00%	Total net gain achieved is less than target set ▲
Trading rules satisfied?	Yes ✓		

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	0.42	0.46	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	0.00	0.00	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	0.60	0.66	0.06	

Input errors/rule breaks present in metric ▲

Evaluation

4.3.3 This report has been produced in order to provide insight on the potential impacts of the full planning application for the proposed easement works associated with the Reserved Matters planning application for 53 dwellings (all matters reserved except access) at Development at Chestnut Avenue Riddings reference AVA/2019/0520). This report also highlights appropriate mitigation and enhancements required in order to avoid a net loss in Biodiversity value, and to achieve the national target of an overall net gain of at least 10% in Biodiversity value. Current design proposals for the site are presented in Appendix 1 of this report.

4.3.4 Using the Statutory Biodiversity metric the proposed scheme results in an overall net gain in of +0.32 'Habitat Units' (+76.85%), and no net change to 'Watercourse Units'.

4.3.5 The proposed scheme has not demonstrated to meet the statutory 10% net gain requirement as set out within Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021), due to the impacts incurred on watercourses within and adjacent to the site.

4.3.6 Under the current assessment trading rules have been satisfied for 'Habitat Units'. This report has considered all available area of open space with maximised potential for retention/enhancement on site in line with good practice principles. Habitat creation has been informed by the distinctiveness of habitat derived from the baseline calculations to reduce impacts on habitat value where possible. Given the nature of the proposals, and location of D3, it is considered unrealistic to proposed enhancement of these features.

4.3.7 In order to secure the habitat creation and target conditions a Habitat Management and Monitoring Plan (HMMP) will be required to safeguard the habitats for 30 years post construction.

5 Habitat Prescriptions

5.1.1 The tables outlined within this section set out the enhanced and created habitats and target conditions and how they will achieve the targets. The specific seed types, establishment, management and monitoring requirements will be secured within a Habitat Management and Monitoring Plan. A map detailing the areas of retention, enhancement and creation have been included within Appendix 3.

5.2 Enhanced Habitats

Table 4: Details of Habitat Enhancement of Other Woodland; Broadleaved woodland

Habitat	Distinctiveness	Condition	Parcel Reference
Other Woodland; Broadleaved	Medium	Poor to Moderate	W3

Description
The existing woodland (W3) is to be enhanced from its current condition of 'Poor' to a condition of 'Moderate'. This will be achieved through removal of undesirable species such as rhododendron which was recorded throughout the woodland. In addition, the ground layer of this parcel can be managed to remove undesirable species such as common nettle (*Urtica dioica*), hogweed (*Heracleum sphondylium*), and also contains a significant amount of bare ground. It is recommended that the ground layer of W2 is re-seeded with a suitable seed mix such as EW1 (or similar approved). Similarly, the shrub and tree layer can be diversified through planting a more diverse range of native species such as, field maple (*Acer campestre*), hornbeam (*Carpinus betulus*), hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), and alder (*Alnus glutinosa*), in addition to selective thinning of sycamore. Existing hazel (*Corylus avellana*) can be coppiced where appropriate to further increase the structural diversity within this woodland. Through appropriate management, it is considered that W2 can achieve a total of 32/39 woodland points, amounting to a condition of 'Moderate'.

Target Condition Criteria				
Other broadleaved woodland	**Good**	**Good**	**Moderate**	**Poor**
A	Age distribution of trees	Three age-classes present.	Two age-classes present.	One age-class present.
B	Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland.	Evidence of significant browsing pressure is present in less than 40% of whole woodland.	Evidence of significant browsing pressure is present in 40% or more of whole woodland.
C	Invasive plant species	No invasive species present in woodland.	Rhododendron *Rhododendron ponticum* or cherry laurel *Prunus laurocerasus* not present, and other invasive species <10% cover.	Rhododendron or cherry laurel present, or other invasive species ≥10% cover.
D	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	Two or less native tree or shrub species across

			woodland parcel.	woodland parcel.
E	**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.
F	**Open space within woodland**	10 - 20% of woodland has areas of temporary open space. Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted.	21 - 40% of woodland has areas of temporary open space.	<10% or >40% of woodland has areas of temporary open space. But if woodland <10ha has <10% temporary open space, please see Good category.
G	**Woodland regeneration**	All three classes present in woodland; trees 4 - 7 cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland.	No classes or coppice regrowth present in woodland.
H	**Tree health**	Tree mortality 10% or less, no pests or diseases and no crown dieback.	11% to 25% tree 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.
I	**Vegetation and ground flora**	Recognisable NVC plant community at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community at ground layer present.	No recognisable woodland NVC plant community at ground layer present.
J	**Woodland vertical structure**	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.
K	**Veteran trees**	Two or more veteran trees per hectare.	One veteran tree per hectare.	No veteran trees present in woodland.
L	**Amount of deadwood**	50% of all survey plots within the woodland parcel	Between 25% and 50% of all survey plots	Less than 25% of all survey plots within

		have deadwood, such as standing and fallen deadwood, large dead branches and or stems, branch stubs and stumps, or an abundance of small cavities13.	within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities13.	the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities13.
M	**Woodland disturbance**	No nutrient enrichment or damaged ground evident14.	Less than 1 hectare in total of nutrient enrichment across woodland area, and or less than 20% of woodland area has damaged ground14.	1 hectare or more of nutrient enrichment, and or 20% or more of woodland area has damaged ground14.

Footnotes

Footnote 1 - See EWBG method INDICATOR 1 for more information. If tree species is not a birch Betula sp., cherry Prunus sp. or Sorbus sp.: 0 – 20 years (Young); 21 - 150 years (Intermediate); and >150 years (Old). For birch, cherry or Sorbus species; 0 - 20 years = Young; 21 - 60 years =Intermediate; >60 years = Old. A recognisable age-class should be a consistent recognisable layer across the woodland or stand being assessed. Presence of a few saplings would not indicate that the woodland has an 'age-class' of young trees.

Footnote 2 - See EWBG method INDICATOR 2 for more information. Browsing pressure is considered to be significant where >20% of vegetation visible within each survey plot shows damage from any type of browsing pressure listed.

Footnote 3 - See EWBG method INDICATOR 3 for more information. Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly.

Check for the presence of all plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), particularly the following invasive non-native species: American skunk cabbage *Lysichiton americanus*; Himalayan balsam *Impatiens glandulifera*; Japanese knotweed *Reynoutria japonica*; cherry laurel *Prunus laurocerasus*; shallon *Gaultheria shallon*; snowberry *Symphoricarpos albus*; variegated yellow archangel *Lamiastrum galeobdolon subsp. argentatum*; rhododendron *Rhododendron ponticum*; and tree-of-heaven *Alianthus altissima*.

Footnote 4 - See EWBG method INDICATOR 4 and Table 2 for more information. The number of different native tree or shrub species including young trees and shrubs. A list of commonly found native tree and

shrub species is provided in Table 2. Not all species listed are native to all parts of the UK. Note a list of commonly found non-native tree species are also included and should be recorded if present.

Footnote 5 - See EWBG method INDICATOR 5 and for more information. The abundance of native tree species in upper (>5 m) and understorey (up to 5 m) layers including young trees and shrubs.

Footnote 6 - See EWBG method INDICATOR 6 for more information. Open space within woodland in this context is temporary open space in which trees can be expected to regenerate (for example, glades, rides, footpaths, areas of clear-fell). This differs from permanent open space where tree regeneration is not possible or desirable (for example, tarmac, buildings, rivers). Area is at least 10 m wide with less than 20% covered by shrubs or trees.

Footnote 7 – Given the increased ratio of edge habitat to woodland where the woodland is <10ha.

Footnote 8 - See EWBG method INDICATOR 8 for more information. This indicator measures regeneration potential of the woodland by considering three classes: seedlings; saplings; and young trees of 4-7 cm DBH. All three classes would fall in the 'young' category of the 'age distribution of trees' indicator, but the regeneration indicator gathers additional information by considering regeneration potential - if seedlings, saplings and young trees are all present that means natural regeneration processes are happening.

Footnote 9 - See EWBG method INDICATOR 9 for more information and Table 3 for a list of diseases and pests and their risk level.

Footnote 10 - See EWBG method INDICATOR 10 directing to NVC key for more information. The 'UKHab to NVC translation table' in the UK Habitat Classification resources may also be useful to assess this."

Footnote 11 – This criterion looks at structural diversity and is useful to understand in conjunction with the age of trees in a woodland. Vertical structure is defined as the number of canopy storeys present. Possible storey values are: 1) Upper; 2) Complex: recorded when the stand is composed of multiple tree heights that cannot easily be stratified into broad height bands (such as upper, middle or lower); 3) Middle; 4) Lower; and 5) Shrub layer. There might be no storeys where the woodland has been felled. See EWBG INDICATOR 11 for more information.

Footnote 12 - See EWBG method INDICATOR 12 for more information. See gov.uk standing advice on ancient and veteran trees. Available from: EWBG INDICATOR 12 is the relevant indicator.

Footnote 13 – See EWBG method INDICATOR 13 for more information. This includes logs, large dead branches on the forest floor and stumps (<1 m tall) >20 cm diameter at narrowest point and >50 cm long. Also includes standing dead trees (>1 m tall) and also deadwood on standing live trees. Diameter is measured at the narrowest point on the stem. Minimum diameter of 20 cm.

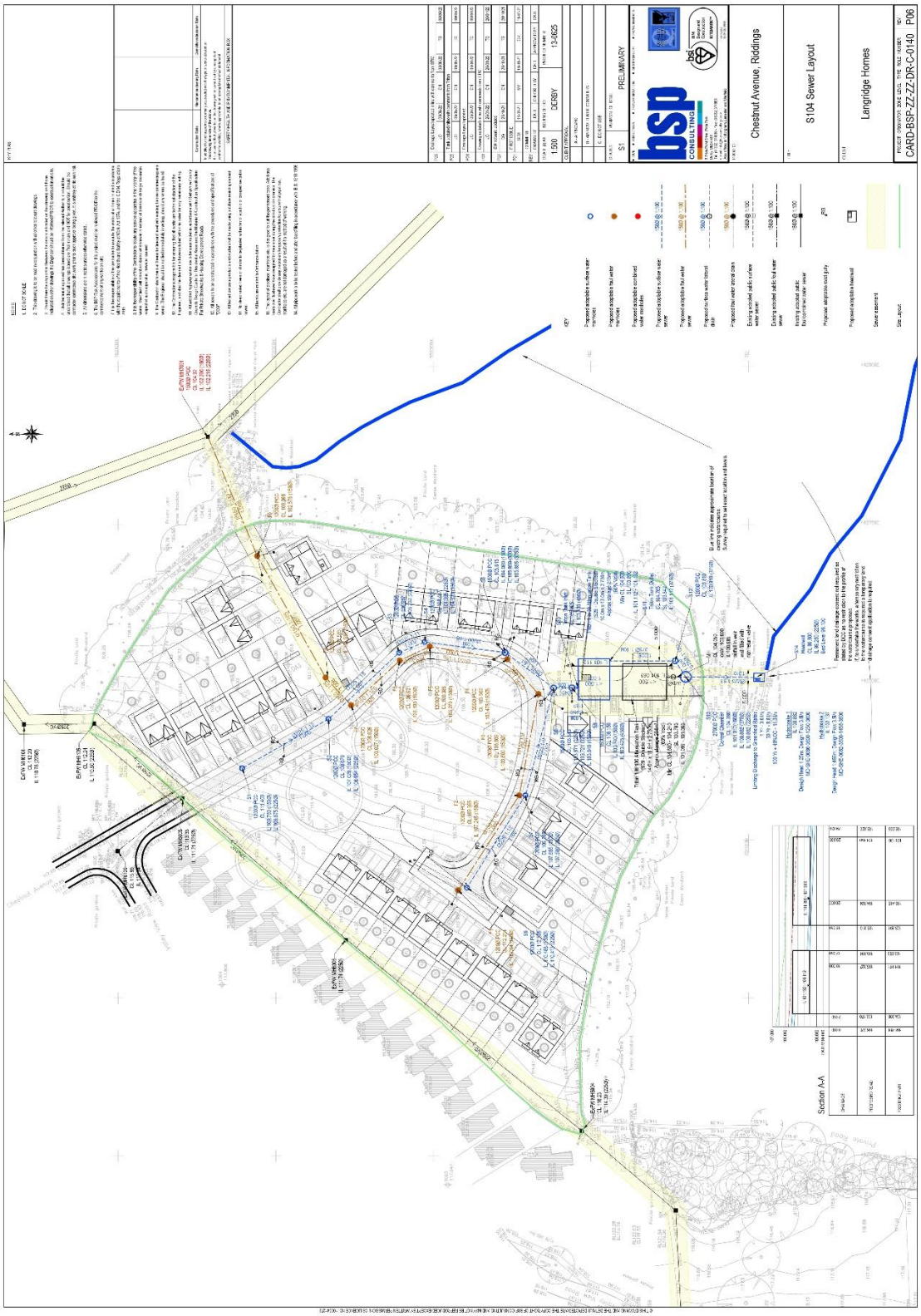
Footnote 14 - See EWBG method INDICATOR 15 for more information. Examples of disturbance are: significant nutrient enrichment; soil compaction from trampling, machinery, animal poaching or litter.

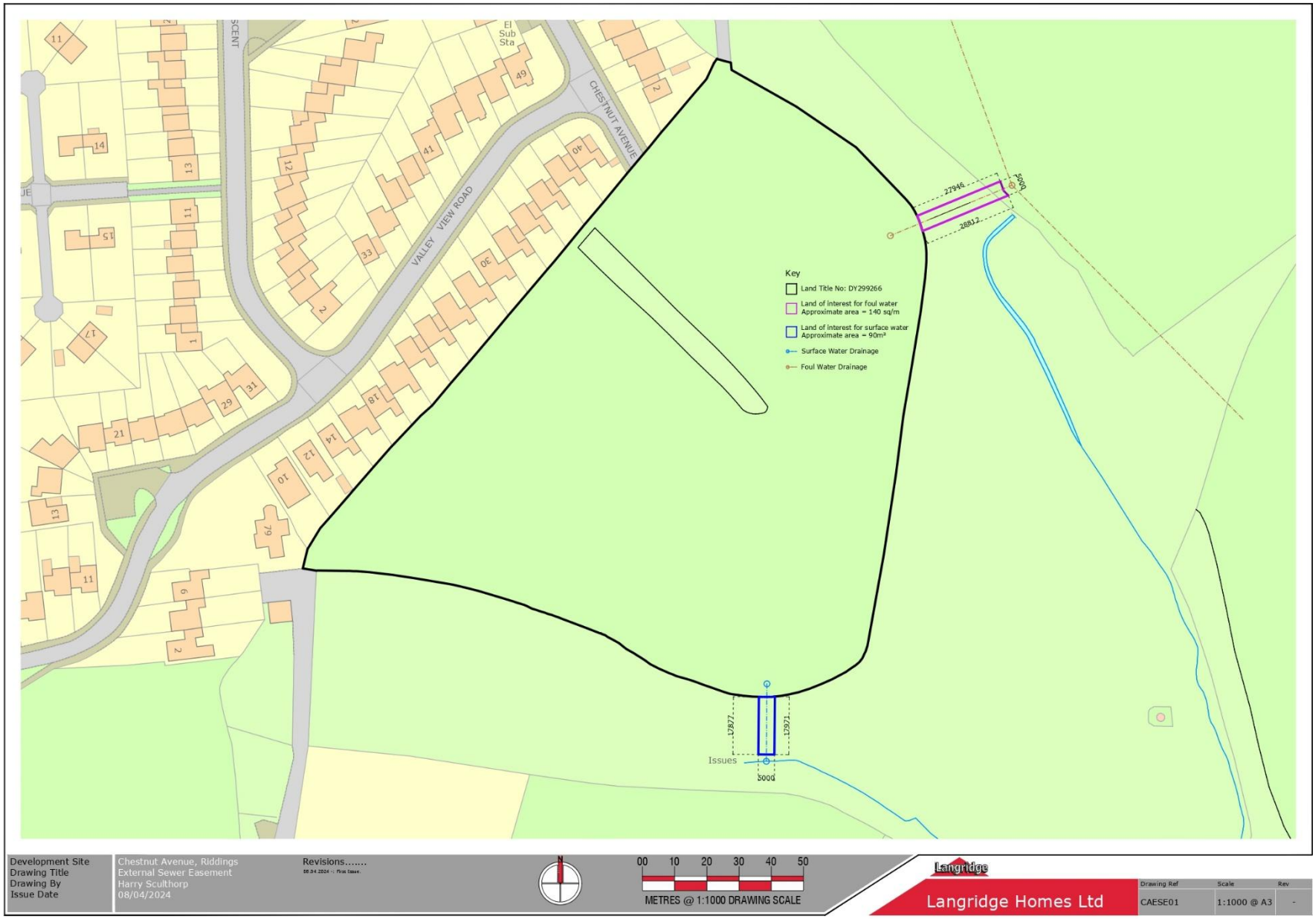
5.3 Created Habitats

Table 5: Details of Habitat Creation of Modified Grassland

Habitat	Distinctiveness	Condition	Parcel Reference
Modified Grassland	Low	Good	G1
Description			
The areas of proposed grassland within the survey areas should be seeded with a species-rich grass mix such as EM1 (or similar approved). The seed mix contains enough species to target essential criterion A; required to achieve anything other than 'Poor' condition. These areas will be managed to prevent establishment of scrub and bracken cover, free of invasive species. Any bare ground or damages areas will be reseeded.			
Target Condition Criteria			
A	There are 6-8 vascular plant species per m^2 present, including at least 2 forbs (these may include those listed in Footnote 1). **Note - this criterion is essential for achieving Moderate or Good condition.** Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m^2 (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.		
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.		
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.		
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.		
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2].		
F	Cover of bracken *Pteridium aquilinum* is less than 20%.		
G	There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]).		
Footnotes			
Footnote 1 – Creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, curled dock *Rumex crispus*, broad-leaved dock *Rumex obtusifolius*, common nettle *Urtica dioica*, creeping buttercup *Ranunculus repens*, greater plantain *Plantago major*, white clover *Trifolium repens* and cow parsley *Anthriscus sylvestris*. Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover. Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement. Footnote 4 – Wildlife and Countryside Act 1981 (as amended).			

Appendix 1. Proposed Plans




CHESTNUT AVENUE
VALLEY VIEW ROAD
El Sub Sta
Key
Land Title No: DY299266
Land of interest for foul water
Approximate area = 140 sq/m
Land of interest for surface water
Approximate area = 90m²
Surface Water Drainage
Foul Water Drainage
27946
5000
28812
17877
17971
5000
Issues
Development Site
Drawing Title
Drawing By
Issue Date
Chestnut Avenue, Riddings
External Sewer Easement
Harry Sculthorp
08/04/2024
Revisions.....
08.04.2024 :: First Issue.
00 10 20 30 40 50
METRES @ 1:1000 DRAWING SCALE
Langridge
Langridge Homes Ltd
Drawing Ref
CAESE01
Scale
1:1000 @ A3
Rev
-

Appendix 2. Habitat Baseline



Appendix 3. Post Development Habitats



Appendix 4. River Condition Assessment

Multi Morph River Name	Survey Type	Shape	Average Width	Positive Index Average	Negative Index Average	Preliminary Condition Score	Final Condition Class
D3	Baseline	1.495	0.58	1.526	0.000	1.526	Fairly Good

Appendix 5. References

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