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11537: Land at Lower Bullingham (The Southern Urban Expansion), Herefordshire

BRIEFING NOTE: BIODIVERSITY NET GAIN ASSESSMENT

INTRODUCTION

1. Ecology Solutions was commissioned by Bloor Homes Ltd. in May 2023 to undertake a Biodiversity Net Gain Assessment of the proposed development at the Land at Lower Bullingham (The Southern Urban Expansion), Herefordshire.
2. The proposals are for the erection of residential dwellings with associated infrastructure, landscaping, attenuation features and areas of open space (including a country park).
3. This document details the Biodiversity Net Gain Assessment undertaken for the above site, using the DEFRA Statutory Biodiversity Metric.

BIODIVERSITY NET GAIN ASSESSMENT

4. This Biodiversity Net Gain Assessment has been based upon the Lower Bullingham Green Infrastructure Plan (07930-FPCR-XX-ZZ-DR-L-0001-Rev C - GI) for the site, which is included at Appendix 1.

Area-based Habitats

5. Existing habitats within the site include cereal crops, modified grassland, mixed scrub, a singular pond (non-priority), ruderal vegetation, developed land; sealed surface and rural trees. The locations of existing habitats within the Site are shown on Plan BNG1. Condition assessments of the existing habitats and trees within the Site are shown in tables 1 & 2 below.

Table 1. Summary of baseline area-based habitats assessed against the DEFRA Statutory Biodiversity Metric Calculation Tool condition sheets.

Habitat	Condition Sheet	Condition Assessment		Condition
		Criteria Number	Criteria Achieved (Y/N)	
Arable	Condition Assessment N/A			
Modified Grassland	Grassland Habitat Type (Low Distinctiveness)	A	N	Poor (5 / 7 passed) Failed Criterion A which is essential for moderate condition
		B	Y	
		C	Y	
		D	N	
		E	Y	
		F	Y	
		G	Y	
Mixed Scrub	Scrub	A	Y	Moderate (3/5 passed)
		B	Y	
		C	Y	
		D	N	
		E	N	
Pond (non-priority)	Pond	A	Y	Moderate (5/9 passed)
		B	N	
		C	Y	
		D	N	
		E	Y	
		F	Y	
		G	Y	
		H	N	
		I	N	
Ruderal/Ephemeral (area beneath hedgerows)	Urban	A	N	Poor (1/3 passed)
		B	N	
		C	Y	
Ruderal/Ephemeral	Urban	A	Y	Poor (1/3 passed)
		B	N	
		C	N	
Developed Land; Sealed Surface	Condition Assessment N/A			

Table 2. Summary of baseline trees assessed against the DEFRA Statutory Biodiversity Metric Calculation Tool condition sheets. Tree numbers/groups are taken from the Arboricultural Assessment (FPCR) dated March 2024.

Tree / Tree Group	Size	A	B	C	D	E	F	Condition	Retained
T4	Small	Y	Y	N	Y	N	Y	Moderate	Y
T5	Large	Y	Y	Y	N	Y	Y	Good	Y
T6	Very Large	Y	Y	Y	N	Y	Y	Good	Y
T7	Small	Y	Y	Y	Y	Y	Y	Good	N
T8	Very Large	Y	Y	Y	N	Y	Y	Good	Y
T19	Medium	Y	Y	N	Y	N	Y	Moderate	Y
T20	Medium	Y	Y	N	Y	N	Y	Moderate	Y
T22	Small	Y	Y	N	Y	N	Y	Moderate	Y
T24	Large	Y	Y	N	Y	N	Y	Moderate	Y
T27	Very Large	Y	Y	Y	Y	N	Y	Good	Y
T28	Large	Y	Y	Y	N	Y	Y	Good	Y
T30	Small	Y	Y	N	N	N	Y	Moderate	Y
T31	Medium	Y	Y	N	Y	Y	Y	Good	Y
T45	Medium	N	Y	N	Y	Y	Y	Moderate	N
T46	Medium	N	Y	N	Y	Y	Y	Moderate	N
T51	Medium	N	Y	Y	Y	N	Y	Moderate	Y
T53	Medium	N	Y	Y	Y	N	Y	Moderate	N
T59	Large	Y	Y	Y	Y	Y	Y	Good	N
T60	Very Large	Y	Y	Y	Y	Y	Y	Good	N
G4	Small	Y	Y	N	Y	N	Y	Moderate	Y
G15	Medium	Y	Y	Y	Y	Y	Y	Good	Y

6. Created habitats include modified grassland, other neutral grassland, traditional orchards, mixed scrub, other woodland; broadleaved, wet woodland, sustainable drainage systems, ponds (non-priority habitat), bioswale, developed land; sealed surface, vegetated gardens and small urban trees. Plan BNG2 shows the proposed habitats within the site.
7. A total of 62 urban trees (not associated with a hedgerow) are also proposed, with all of these trees classified as 'small' as these will be 8-10cm in diameter at the time of planting. When inputting 62 small trees into the DEFRA Statutory Metric, a total area of 0.252ha is automatically calculated by the embedded tree helper within the calculator.

8. Condition assessments of the proposed habitats within the Site are shown in tables 3 & 4 below.

Table 3. Summary of proposed area-based habitats assessed against the DEFRA Statutory Biodiversity Metric Calculation Tool condition sheets.

Proposed Habitat	Condition Sheet	Condition Assessment		Condition
		Criteria Number	Criteria Achieved (Y/N)	
Modified Grassland	Grassland Habitat Type (Low Distinctiveness)	A	N	Poor (4/7 passed)
		B	N	
		C	Y	
		D	Y	
		E	N	
		F	Y	
		G	Y	
Other Neutral Grassland	Grassland Habitat Type (Medium Distinctiveness)	A	Y	Moderate (5/6 passed) Failed Criterion F as a conservative estimate
		B	Y	
		C	Y	
		D	Y	
		E	Y	
		F	N	
Traditional Orchard	Orchard	A	N	Moderate (6 / 8 passed)
		B	N	
		C	Y	
		D	Y	
		E	Y	
		F	Y	
		G	Y	
		H	Y	
Mixed Scrub	Scrub	A	Y	Moderate (4/5 passed)
		B	N	
		C	Y	
		D	Y	
		E	Y	
Ruderal/Ephemeral (area beneath hedgerows)	Urban	A	N	Poor (1/3 passed)
		A	N	
		A	N	
SuDS	Urban	A	Y	Good (5 / 5 passed)
		B	Y	
		C	Y	
		E1	Y	

		E2	Y	
Pond (non-priority)	Pond	A	Y	Good (9 / 9 passed)
		B	Y	
		C	Y	
		D	Y	
		E	Y	
		F	Y	
		G	Y	
		H	Y	
		I	Y	
Bioswale	Urban	A	Y	Good (5 / 5 passed)
		B	Y	
		C	Y	
		E1	Y	
		E2	Y	
Developed Land; Sealed Surface	Condition Assessment N/A			
Vegetated Garden	Condition Assessment N/A			

Table 4. Summary of proposed woodland habitat (broadleaved and wet woodland) assessed against the DEFRA Statutory Biodiversity Metric Calculation Tool condition sheets.

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

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	3
Open space within woodland	10 – 20% of woodland has areas of temporary open space, unless woodland is <10ha in which case lower threshold of 10% does not apply	21- 40% of woodland has areas of temporary open space	More than 40% of woodland has areas of temporary open space	3
Woodland regeneration⁵	All three classes present in woodland; trees 4-7cm dbh, saplings and seedlings or advanced coppice regrowth	One or two classes only present in woodland	No classes or coppice regrowth present in woodland	2
Tree health	Tree mortality less than 10%, no pests or diseases and no crown dieback	11% to 25% mortality and/or crown dieback or low risk pest or disease present	Greater than 25% tree mortality and or any high risk pest or disease present	3
Vegetation and ground flora	Ancient woodland flora indicators present	Recognisable NVC plant community present	No recognisable NVC community	2
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	1
Veteran trees	Two or more veteran trees per hectare	One veteran tree per hectare	No veteran trees present in woodland	1

Amount of deadwood	50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Between 25% and 50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Less than 25% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	1
Woodland disturbance⁸	No nutrient enrichment or damaged ground evident	Less than 1 hectare in total of nutrient enrichment across woodland area and/or less than 20% of woodland area has damaged ground	More than 1 hectare of nutrient enrichment and/or more than 20% of woodland area has damaged ground	3
Condition		Moderate (29/39)		

Hedgerows

9. A total of 19 hedgerows are present within the site consisting of 5 native hedgerows (H5, H7, H18 and H19), 10 species-rich native hedgerows (H1, H2, H3, H4, H6, H10, H11, H14, H16 and H17), 4 species-rich native hedgerows associated with a bank or ditch (H8, H12, H13 and H15) and one ornamental hedgerow (H9). Three lines of trees associated with a bank or ditch are also present within the site, one on either side of Red Brook (TL1 and TL2) and one running intermittently along the east bank of Norton Brook (TL3). All existing lines of trees are to be retained post-development.
10. The condition assessments of existing hedgerows and lines of trees within the Site are shown in tables 5 and 6 below.

Table 5. Existing hedgerows assessed against the DEFRA Statutory Biodiversity Metric Calculation Tool condition sheets.

Hedgerow No.	A1	A2	B1	B2	C1	C2	D1	D2	Condition
H1	Y	Y	Y	Y	Y	N	Y	Y	GOOD
H2	Y	Y	Y	N	Y	N	Y	Y	GOOD
H3	Y	Y	Y	Y	Y	N	Y	Y	GOOD
H4	Y	Y	Y	Y	Y	N	Y	Y	GOOD

H5	Y	Y	Y	Y	Y	N	Y	Y	GOOD
H6	N	Y	N	Y	Y	N	Y	Y	GOOD
H7	Y	Y	Y	Y	N	Y	Y	Y	GOOD
H8	Y	Y	Y	Y	Y	Y	Y	Y	GOOD
H9	Condition Assessment N/A								
H10	Y	Y	Y	Y	Y	N	Y	Y	GOOD
H11	Y	Y	Y	Y	N	N	Y	Y	MODERATE
H12	Y	Y	Y	Y	Y	Y	Y	Y	GOOD
H13	Y	Y	Y	Y	Y	Y	Y	Y	GOOD
H14	Y	Y	Y	N	Y	N	Y	Y	GOOD
H15	Y	Y	Y	Y	Y	Y	Y	Y	GOOD
H16	Y	Y	Y	Y	Y	Y	Y	Y	GOOD
H17	Y	Y	Y	Y	Y	Y	Y	Y	GOOD
H18	Y	Y	Y	Y	Y	N	Y	Y	GOOD
H19	N	N	Y	N	Y	N	Y	Y	MODERATE

Table 6. Existing lines of trees assessed against the DEFRA Statutory Biodiversity Metric Calculation Tool condition sheets.

Line of Trees	A	B	C	D	E	Condition
TL1	Y	N	Y	N	Y	Moderate
TL2	Y	N	Y	N	Y	Moderate
TL3	Y	N	Y	N	Y	Moderate

11. It is recommended that native hedgerows be bolster planted with native species comprising at least 5 different hedgerow species and appropriate management regime introduced. On this basis, hedgerows H7 and H19 are proposed to be enhanced to native species-rich hedgerows in good condition as part of the proposals. Additionally, the proposed planting of trees within the retained hedgerows will further enhance hedgerows H1, H2, H3, H4, H7 and H19 to species-rich hedgerows with trees.
12. While hedgerows H5, H8 and H18 will be lost under the new development, a total of 2.314km of species-rich native hedgerow with trees will be provided along with 0.162km of species-rich native hedgerow as part of the proposals. The locations of the proposed hedgerow are shown on Plan BNG2, while the condition assessment is shown in table 7 below.

Table 7. Proposed hedgerows assessed against the DEFRA Statutory Biodiversity Metric Calculation Tool condition sheets.

Type	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	Condition
Species-rich Native Hedgerow with Trees	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	GOOD
Species-rich Native Hedgerow	Y	Y	Y	Y	Y	Y	Y	Y	N/A	N/A	GOOD

Watercourses

13. As the Norton Brook and Red Brook lie within 10m of the Site boundary, these watercourses were included as part of the Biodiversity Net Gain Assessment. Plan BNG1 shows the extent of the streams that lie within 10m of the Site boundary.
14. Both streams were subject to a River Condition Assessment (RCA) by an accredited Modular River Physical (MoRPh) survey surveyor. Five contiguous MoRPh surveys were undertaken to create MoRPh 5 surveys and this data was combined with a desk study to determine the type and condition of the river. On average, the streams width both fell within the <5m width category and as such, MoRPh module lengths of 10m were used to undertake the assessment.
15. Two subreaches of MoRPH 5 surveys were undertaken along the Red Brook, which therefore equates to a total of 100m of the river's length. As the length surveyed is in excess of 20% of the total river length that lies within 10m of the Site boundary, it is considered that a robust assessment of the river's condition has been undertaken.
16. Three subreaches of MoRPH 5 surveys were undertaken along the Norton Brook, which therefore equates to a total of 150m of the river's length. As the length surveyed is in excess of 20% of the total river length that lies within 10m of the Site boundary, it is considered that a robust assessment of the river's condition has been undertaken.
17. The existing conditions of the Red Brook and Norton Brook were calculated as moderate.
18. Part of this survey includes measuring the dimension of the river channel and while measuring these dimensions it was considered that both the Red Brook and Norton Brook are highly likely to be overdeep. The Guide to Assessing River Condition defines overdeep as:

“a river channel whose depth relative to its width suggests that the bed has been incised/dredged and/or the bank tops have been raised with the result that flood flows are less likely to connect with the bank tops and floodplain than if the channel cross-profile were unmodified.”

19. The guide also states that:

"River shape is used to assess the likelihood of a surveyed channel being sufficiently overdeep to adversely affect its hydrological/ecological lateral connectivity:

If River shape has a value of < 2 the river is highly likely to be overdeep.

If River shape has a value of < 4 the river is likely to be overdeep, especially if the Average width is greater than 10 m.

...

If the presence of an overdeep channel seems to be a reasonable judgement then the RCA for your site should be reduced by one class (e.g. from Good to Fairly Good, or from Moderate to Fairly Poor)".

20. Where:

"River Shape = " "Average MoRPh width" /"Average (water depth + lower bank height)" " "

21. As such, both watercourses were downgraded from Moderate condition to Fairly Poor condition.

22. Enhancements to the Norton Brook include creating a 10m buffer along 225m of the watercourse wherein at least a third of the area adjacent to the watercourse is wetland habitat, the remainder being neither arable or developed land. This shifts Norton Brook up a condition category to Moderate while Red Brook remains in Fairly Poor condition.

Calculation

23. Following calculations based upon the illustrative proposals undertaken using DEFRA Statutory Biodiversity Metric Calculation Tool, it can be seen that a net gain in biodiversity can be delivered as a result of the proposed development. Specifically, an increase in habitat units from 98.25 units to 118.28 units which equates to a **20.38% increase** overall.

24. An increase in hedgerow units has also been calculated, from 43.64 units to 52.39 units (which equates to a **20.03% increase**). This net increase in hedgerow units does not currently meet trading rules due to the loss of habitat (species-rich hedgerow associated with a bank or ditch) that requires 'like for like or better' post development. As such, incorporating species-rich native hedgerow associated with a bank or ditch into the proposed development, with a length of 310m, will satisfy trading rules and raise hedgerow net gain to 28.37%. The DEFRA Statutory Biodiversity Metric Calculation is shown at Appendix 2.

25. The proposed enhancement of 225m of Norton Brook satisfies trading rules and increases watercourse units from 9.48 units to 9.82 units (which equates to a **3.53% increase**). While this is below the 10% target, the creation of ditches within the site with a total length of 130m would raise the net gain in watercourse units to 10.35%.

26. These calculations are based on certain assumptions made from the current proposals. These being that all retained native hedgerows will be enhanced to

species-rich hedgerows (with any hedgerows in moderate condition also being improved to good condition), and that a third of the land being enhanced along the Norton Brook is wet woodland while the other two thirds are other neutral grassland. A 70:30 split between developed land; sealed surface and vegetated gardens is also assumed for the proposed residential development.

27. It should be noted that the DEFRA Biodiversity Metric calculation does not take into consideration measures relating to protected or notable species. The provision of new species-rich grassland will provide enhanced foraging opportunities for Badgers, bats, and birds, as well as habitat for invertebrates, amphibians and reptiles. New native tree and hedgerow planting will provide enhanced foraging and navigational opportunities for bats, foraging and nesting opportunities for birds and foraging opportunities for Badgers, potential hibernation/shelter opportunities for amphibians and reptiles, as well as enhanced habitat for invertebrates. The provision of new SuDS features will also provide enhanced aquatic habitat for amphibians and invertebrates as well as enhanced foraging opportunities for bats and foraging/nesting opportunities for birds.
28. A number of additional enhancements will also be provided as part of the proposed development, that are not accounted for within the net gain calculation. This includes the provision of bat boxes providing enhanced roosting opportunities for bats and bird boxes providing enhanced nesting opportunities for birds post-development.

CONCLUSION

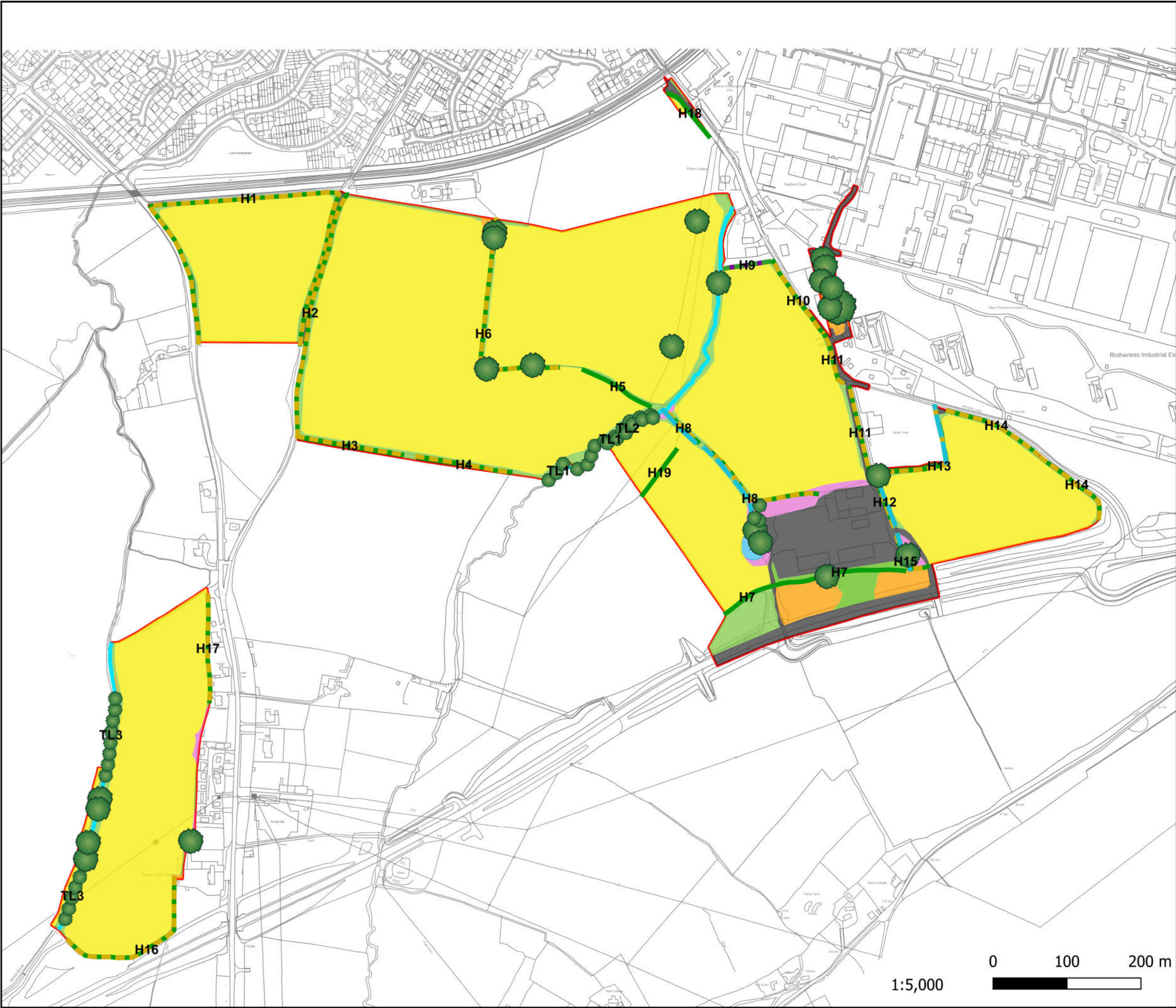
29. The calculation indicates that a net gain in biodiversity can be achieved under the current development proposals subject to the meeting of hedgerow trading rules and the creation of watercourses (ditches) as described above.
30. It is also considered that the development proposals will deliver a further net gain in biodiversity through the additional enhancement measures detailed above that are not accounted for within the calculation. As such, it is considered that it has been demonstrated that the proposed development will achieve an overall net gain in biodiversity over the existing situation.

Ecology Solutions
March 2024

PLANS

PLAN BNG1

Baseline Habitats



KEY:

- SITE BOUNDARY
- CEREAL CROPS
- MODIFIED GRASS
- DEVELOPED LAND; SEALED SURFACE
- MIXED SCRUB
- RUDERAL VEGETATION
- HEDGEROW (AREA)
- POND (NON-PRIORITY)
- HEDGEROW
- SPECIES-RICH HEDGEROW
- WET DITCH
- ORNAMENTAL HEDGEROW
- TREE LINE
- STREAM
- TREE



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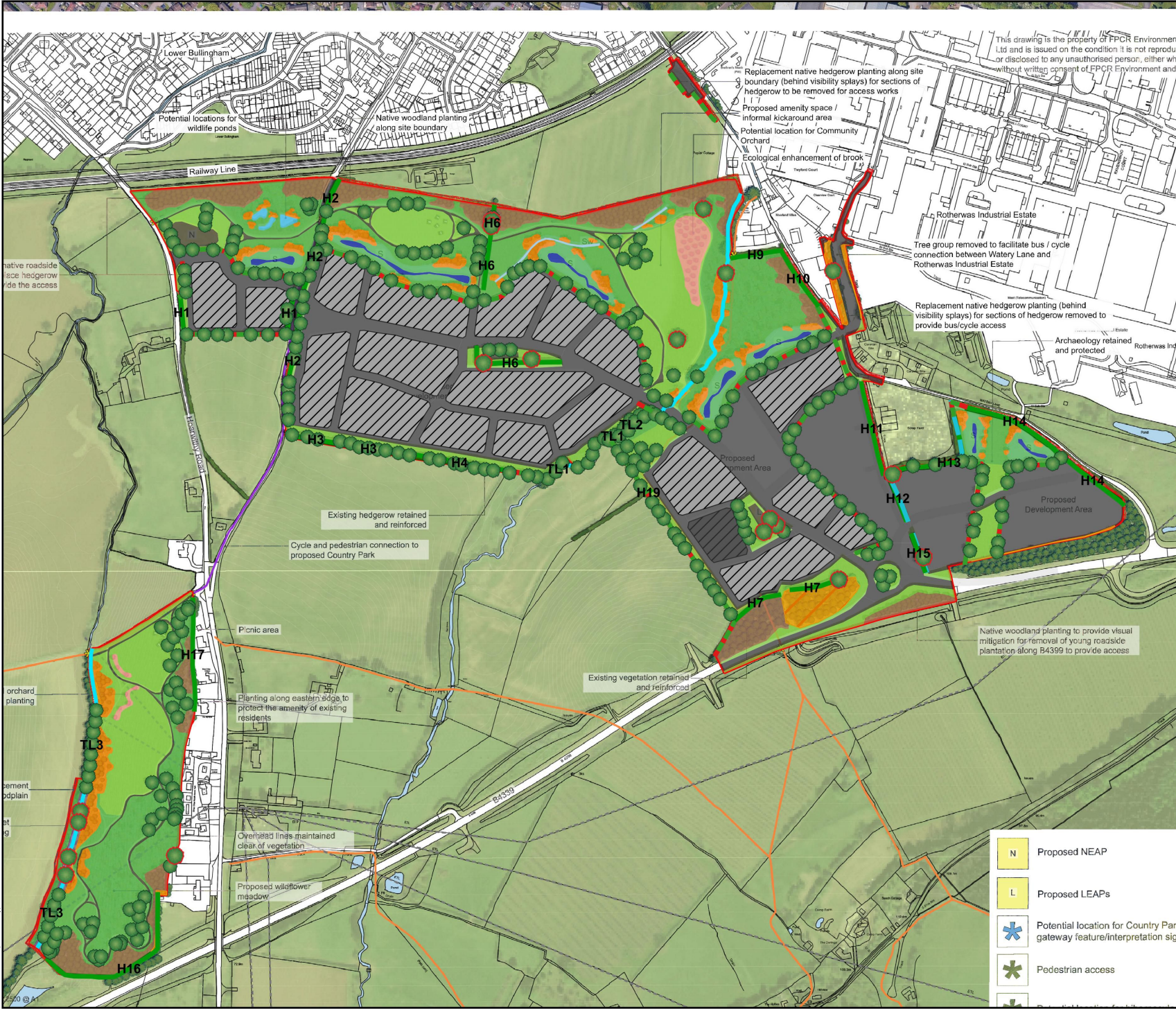
11537: LAND AT LOWER BULLINGHAM
(THE SOUTHERN URBAN EXPANSION)

PLAN: BNG1

Rev: B
Oct 2024

PLAN BNG2

Proposed Habitats



KEY:

- SITE BOUNDARY
- BUILT ENVIRONMENT (ASSIGNED 70:30 DEVELOPED:GARDENS)
- DEVELOPED LAND; SEALED SURFACE
- MODIFIED GRASSLAND
- OTHER NEUTRAL GRASSLAND
- SuDS
- ORCHARD
- WILDLIFE POND
- PROPOSED WOODLAND
- RETAINED SCRUB
- RETAINED HEDGEROW (AREA)
- PROPOSED HEDGEROW (AREA)
- PROPOSED SCRUB
- SWALE
- WETLAND HABITAT (ASSUMED WET WOODLAND)
- TREE LINE
- HEDGEROW
- RETAINED HEDGEROW
- WET DITCH
- PROPOSED HEDGEROW
- STREAM
- RETAINED TREE



Part of the ES Group

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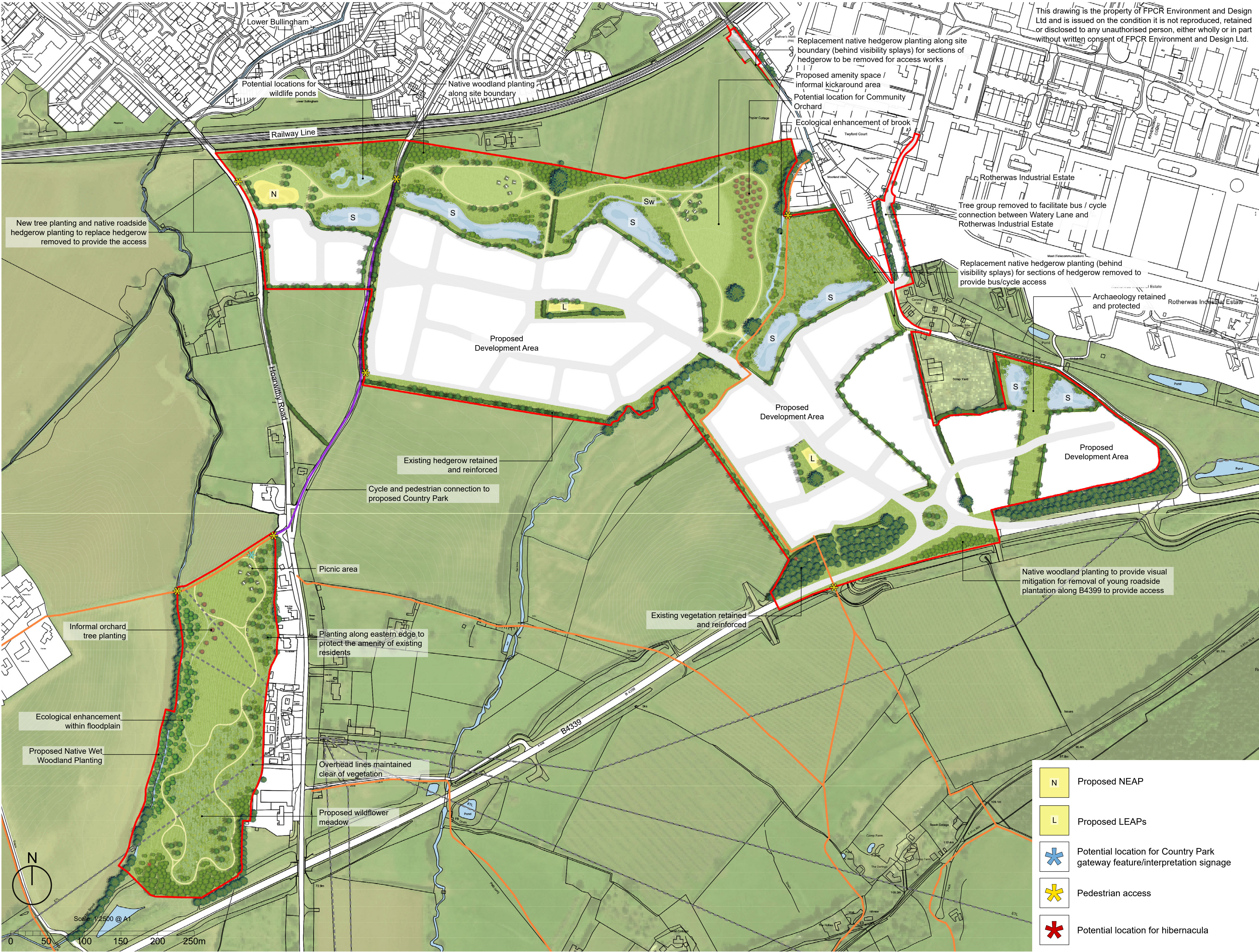
PLAN: BNG2

Rev: B
August
2024

ANNEXES

ANNEX 1

Site Layout



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- Site boundary
- Existing woodland/trees/hedgerow retained (Refer to Tree Survey)
- Proposed Parkland Trees
 - Indicative mix
 - Species
 - Girth
 - Root
 - RB
- Proposed Riparian Scrub / Wet Woodland
 - Indicative Mix
 - Species
 - Size
 - Root
 - br
- Proposed Native Woodland
 - Indicative Mix
 - Species
 - Size
 - Root
 - br
- Proposed Native Hedgerow
 - Indicative Mix
 - Species
 - Size
 - Root
 - br
- Proposed Orchard Trees
- Existing grassland
 - To be resown with Emorsgate EM2 or similar where disturbed through construction
- Proposed Wildflower Grassland
 - To be sown with Emorsgate EM2 or similar
- Proposed Amenity Grassland
 - To be sown with Emorsgate EG22 or similar
- SuDS Basins (S) and Swale (Sw) (Indicative)
 - To be sown with Emorsgate EG8 or similar
- Potential locations for picnic areas
- Indicative pedestrian routes
- Existing Public Right of Way (PROW)
- Pedestrian connection to Country Park

ANNEX 2

DEFRA Statutory Biodiversity Metric

Area habitat summary	
Total Net Unit Change	\$0.00
Total Net % Change	\$0.00%
Trading Entry Initiated	Yes ✓
Area Check	Area Acceptable ✓

Project Name:

Map Reference:

B-1 On-Site Hedge Baseline

Condense / Show Columns

Condense / Show Rows

Menu

Hedgerow summary	
Total Net Use Change	12.56
Total Net % Change	88.97%
Trading Rules Satisfied	Yes ✓

Ref	Hedge number	Existing hedgerow habitats		Distastiveness		Condition		Strategic significance			Required Action to Meet Trading Rules	Ecological habitat Total hedgerow width
		Habitat type	Length (m)	Distastiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier		
1	H1	Species rich native hedgerow	0.669	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	8.03
2	H2	Species rich native hedgerow	0.337	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	4.04
3	H3	Species rich native hedgerow	0.143	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	1.72
4	H4	Species rich native hedgerow	0.127	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	1.52
5	H5	Native hedgerow	0.102	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	0.81
6	H6	Species rich native hedgerow	0.31	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	3.74
7	H7	Native hedgerow	0.247	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	1.49
8	H8a	Species-rich native hedgerow - associated with bank or ditch	0.148	High	6	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	2.66
9	H9	Non native and ornamental hedgerow	0.059	V Low	1	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	0.06
10	H10	Species rich native hedgerow	0.126	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	1.61
11	H11	Species rich native hedgerow	0.194	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	1.65
12	H12	Species-rich native hedgerow - associated with bank or ditch	0.069	High	6	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	1.34
13	H13	Species rich native hedgerow - associated with bank or ditch	0.176	High	6	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	3.30
14	H14	Species rich native hedgerow	0.256	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	3.07
15	H15	Species-rich native hedgerow - associated with bank or ditch	0.073	High	6	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	1.31
16	H16	Species rich native hedgerow	0.232	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	2.78
17	H17	Species rich native hedgerow	0.142	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	1.70
18	H18	Native hedgerow	0.051	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	0.31
19	H19	Native hedgerow	0.076	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	0.30
20	TL1	Line of trees - associated with bank or ditch	0.177	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	0.71
21	TL2	Line of trees - associated with bank or ditch	0.075	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	0.30
22	TL3	Line of trees - associated with bank or ditch	0.176	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	0.71
23	H8b	Species rich native hedgerow	0.09	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distastiveness based on better	1.08
24												
25												
26												
27			4.06									43.64

						Comments			
Length retained	Length exhausted	Units retained	Units exhausted	Length lost	Units lost	User comments	Planning authority comments	Habitat reference number	
0.046	0.046	0.55	0.55	0.58	6.92				
		0.312	0.00	3.74	0.03				
		0.139	0.00	1.67	0.00				
		0.127	0.00	1.52	0.00				
0		0.00	0.00	0.10	0.61				
0.228		2.74	0.00	0.08	0.98				
	0.118	0.00	0.71	0.13	0.77				
0		0.00	0.00	0.15	2.66	associated with ditch			
0.059		0.56	0.00	0.00	0.00				
0.083		1.00	0.00	0.04	0.52				
0.12		0.96	0.00	0.07	0.59				
0.059		1.06	0.00	0.01	0.19				
0.164		2.85	0.00	0.01	0.25				
0.233		2.80	0.00	0.02	0.28				
0.048		0.86	0.00	0.03	0.45				
0.232		2.78	0.00	0.00	0.00				
0.142		1.70	0.00	0.00	0.00				
0		0.00	0.00	0.05	0.31				
	0.007	0.00	0.03	0.07	0.29				
0.177		0.71	0.00	0.00	0.00				
0.075		0.30	0.00	0.00	0.00				
0.178		0.71	0.00	0.00	0.00				
0		0.00	0.00	0.09	1.08	not associated with ditch			
1.84	0.75	19.19	6.28	1.47	16.25				

Project Name:Map Reference:

B-2 On-Site Hedge Creation

Condense / Show Columns

Condense / Show Rows

Hide Menu

Hedgerow summary	
Total Net Unit Change	13.38
Total Net % Change	89.91%
Treding Index Installed	Yes ✓

		Proposed habitats		Disturbances		Condition		Strategic significance			Temporal multiplier					Difficulty risk multipliers					Comments		
Ref	New hedge number	Habitat type	Length (m)	Disturbances	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier	Standard Time to target condition (years)	Habitat created in advance (years)	Delay in starting habitat creation (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied	User comments	Planning authority comments	Habitat reference number
1	1	Species-rich native hedgerow with trees	2.514	High	8	Good	3	Awakencompensation not in local strategy no local strategy	Low Strategic Significance	1	20			Standard time to target condition applied	20	0.490	Low	Standard difficulty applied	Low	1	20.43		
2		Species-rich native hedgerow	0.162	Medium	4	Good	3	Awakencompensation not in local strategy no local strategy	Low Strategic Significance	1	12			Standard time to target condition applied	12	0.632	Low	Standard difficulty applied	Low	1	1.21		
3		Species-rich native hedgerow - associated with bank or ditch	0.31	High	6	Good	3	Awakencompensation not in local strategy no local strategy	Low Strategic Significance	1	12			Standard time to target condition applied	12	0.652	Low	Standard difficulty applied	Low	1	3.64		
4																							
5																							
			8.70																				
			89.93																				

[illegible]

Project Name: Map Reference:
C-1 On-Site WaterC² Baseline

Condense / Show Columns

Condense / Show Rows

More Menu

Watercourse summary	
Total Net Unit Change	0.38
Total Net % Change	10.33%
Trading Rules Ratiobased	Yes ✓

Rating watercourse type			Disturbances		Condition		Strategic significance			Watercourse encroachment		Bipartisan encroachment		Required Action to Meet Trading Rules	Ecologist baseline	Comments									
Ref	Watercourse type	Length (m)	Disturbances	Score	Condition	Score	Strategic significance	Strategic significance multiplier	Strategic significance multiplier	Extent of encroachment	Multiplier	Extent of encroachment for both beds	Multiplier			Length retained	Length excluded	Units retained	Units excluded	Length Lost	Units Lost	Regiole compensation agreed for losses of VHDM	User Comments	Planning authority comments	Habitat reference number
1	Other rivers and streams	0.087	High	6	Fairly Poor	1.5	Formally identified in local strategy	High strategic significance	1.15	No Encroachment	1	Modest/no No Encroachment	0.92	Same habitat retained i.e.	0.83	0.087		0.83	0.00	0.00	0.00		Red Brook - Existing No/Mod Encroachment		
2	Other rivers and streams	0.425	High	6	Fairly Poor	1.5	Formally identified in local strategy	High strategic significance	1.15	No Encroachment	1	No Encroachment No Encroachment	1	Same habitat retained i.e.	4.36	0.366		3.79	0.00	0.06	0.58		Red Brook - Existing No Encroachment		
3	Other rivers and streams	0.4	High	6	Fairly Poor	1.5	Formally identified in local strategy	High strategic significance	1.15	No Encroachment	1	No Encroachment No Encroachment	1	Same habitat retained i.e.	4.14	0.175	0.235	1.81	2.33	0.00	0.00		Norton Brook		
4	Ditches	0.03	Medium	4	Poor	1	Formally identified in local strategy	High strategic significance	1.15	No Encroachment	1	No Encroachment No Encroachment	1	Same habitat retained i.e.	0.14	0		0.00	0.00	0.03	0.14		Ditch to south of HR (not associated with hedgerow)		
5																									
6																									
7																									
8																									
		0.24														0.68	0.68	6.48	2.55	0.00	0.78				

Project Name: Map Reference:				Watercourse summary																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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Project Name:	Map Reference:
C-3 On-Site Water [®] Enhancement	
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<input type="button" value="Main Menu"/>	

Headline Results		Return to results menu	
Scroll down for final results ▲			
On-site baseline	Habitat units	98.25	
	Hedgerow units	43.64	
	Watercourse units	9.48	
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	118.28	
	Hedgerow units	56.02	
	Watercourse units	10.47	
On-site net change (units & percentage)	Habitat units	20.03	20.38%
	Hedgerow units	12.38	28.37%
	Watercourse units	0.98	10.35%

Off-site baseline	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change <small>(units & percentage)</small>	Habitat units	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%

Combined net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	20.03	
	Hedgerow units	12.38	
	Watercourse units	0.98	
Spatial risk multiplier (SRM) deductions	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	

FINAL RESULTS			
Total net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	20.03	
	Hedgerow units	12.38	
	Watercourse units	0.98	
Total net % change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	20.38%	
	Hedgerow units	28.37%	
	Watercourse units	10.35%	
Trading rules satisfied?	Yes ✓		

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	98.25	108.08	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	43.64	48.01	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	9.48	10.43	0.00	No additional watercourse units required to meet target ✓

Input errors/rule breaks present in metric ▲