The Biodiversity Metric 2.0 - Calculation Tool
Start page

Project details

Planning authority:	**Barnsley Metropolitan Borough Council**
Project name:	**Land West of Sheffield Road, Hoyland - Attenuation Land**
Applicant:	**Newland Developments**
Application type:	**Hybrid Application**
Planning application reference:	
Assessor:	**BJC**
Reviewer:	**SJA**
Revision:	
Assessment date:	**16.04.21**
Planning authority reviewer:	

Cell style conventions

	Enter data
	Automatic lookup
	Result

Instructions

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Results

View all

Reset view

The Biodiversity Metric 2.0 - Calculation Tool Instructions

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NATURAL ENGLAND

The Biodiversity Metric 2.0

auditing and accounting for biodiversity

Calculation Tool: Short Guide

Beta Version

July 2019

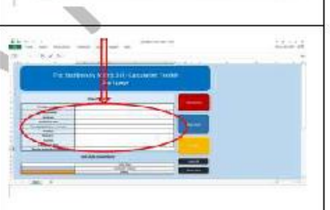
ISBN 978-1-78354-540-7

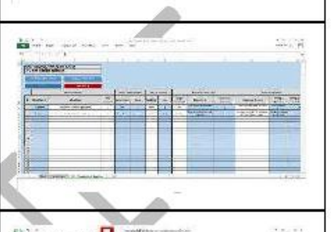
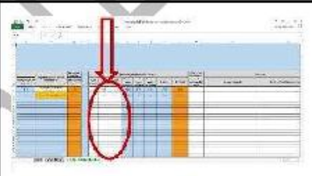
The Biodiversity Metric 2.0 – Calculation Tool Guidance

This guide shows you how to use the biodiversity metric 2.0 calculation tool in six quick steps.

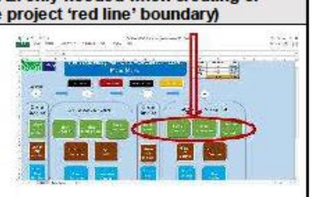
Before starting you will need to know the following about your project:

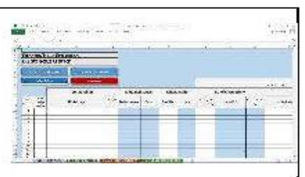
- The types of habitat involved (on-site and off-site)
- The size of each habitat parcel (in hectares or, if linear, kilometres)
- The condition of each habitat parcel
- How ecologically connected the site(s) are
- Whether the site(s) are in locations identified as local nature priorities

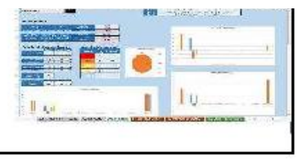
START	
Open tool on any laptop with spreadsheet software installed. Press "Open Tool".	
This is the start page. Input details of your project into "Project Details". **Remember to periodically save your work.**	
Click the "Main Menu" button. The Worksheet Menu will then open like this. The next steps explain how to enter the key data for your project.	

Step 1: Entering Baseline Data	
Click the green "On-site habitat baseline" button at the left hand side of the page:	
Fill in all of the white columns. Some allow you to select from drop-down lists, others (such as Area) require you to input data. The tool will start automatically populating the blue columns.	
Scroll right and fill in all remaining "white" columns. Complete a new row for every habitat parcel found on site.	
When you have finished entering all the site baseline data scroll left and click the "Main menu" button.	

Step 2: Entering On- Site Post-Development Data	
In the Main Menu there are three buttons to enter data; "Habitat Creation", "Habitat Enhancement" and "Habitat Accelerated Succession". Data can be entered into each as appropriate by clicking the relevant green button.	
When you click on each "on-site post development" button a new screen will open. Fill in each of the white columns as appropriate. You will need to complete a new row for each habitat parcel on-site. Image shows the habitat creation screen.	
When you have finished entering data click the "Main menu" Button in the top left of the screen to return to the worksheet menu.	
Complete the "On-site habitat enhancement" and "On-site habitat accelerated succession" if needed by clicking the buttons and filling in the white columns. When finished return to the "Main menu".	
If you are seeking to achieve a biodiversity net gain outcome on-site no further data input is needed. You can now skip to "Step 4" to check the results and see whether an on-site biodiversity net gain has been achieved.	

Step 3: Entering Off-Site Data (NOTE: only needed when creating or enhancing habitat outside the project 'red line' boundary)	
You may skip this step if you are not creating or enhancing any habitats outside your development site and proceed to Step 4. Projects creating or enhancing any habitats outside your development ("off-site") will need to enter baseline habitat and habitat enhancement/creation data. This data can be entered using the green buttons highlighted under points 3 and 4 of the tool.	
Off-site data should be entered into the white columns on each of the off-site sheets. When entering data scroll right on the screen to ensure that all white data entry fields are completed. Complete a new row for each habitat type found off-site.	
When all "off-site" data has been entered click on the 'main menu' button.	
Step 4: Hedgerows, Lines of Trees, Rivers and Streams	
If your project contains hedgerows, lines of trees or rivers, streams and watercourses then you will need to fill in the additional metric modules for these habitats. They are separate from the main metric as each uses a slightly different calculation.	

On-site and off-site project data for these habitats should be entered in the same way as for area habitats by inputting data into the white columns.	
Step 5: The Results	
Click on the "Results" to see whether or not your project has achieved a forecast net biodiversity gain.	
On this screen you can click to see the "headline results", "detailed results" or the 'habitat trading summary'. In most circumstances only the 'headline' or 'detailed' results will be needed.	
The "headline results" page provides a breakdown of the biodiversity units lost and gained and the percentage loss or gain achieved in biodiversity units.	
For more detailed results click the "Detailed Results" button.	



Step 6: Saving and Submitting Your Assessment	
Go to save as and save the document as the same name as the user has put in the project title.	
Additional Functions	
Street Tree Helper The calculation tool also comes with a street tree helper to quickly convert your street tree measurements into an area calculation to use when calculating baseline and post-intervention values for street trees. Enter the number of trees of each size type and the tool will convert this into hectares.	
Technical Data Information about all of the technical data that underpins the calculation tool can be found by clicking the "Technical data" button on the main menu There is also a **conversion tool** embedded into the technical data section to allow for easy conversion between Phase1 and UKHab classifications.	
Instructions A copy of these instructions can be accessed at any point in the tool by pressing the red instructions button	
Additional help and detailed instructions describing all of the functions of the calculation tool can be found in Chapter 4 of *The Biodiversity Metric 2.0 – User Guide*	

The Biodiversity Metric 2.0 - Calculation Tool
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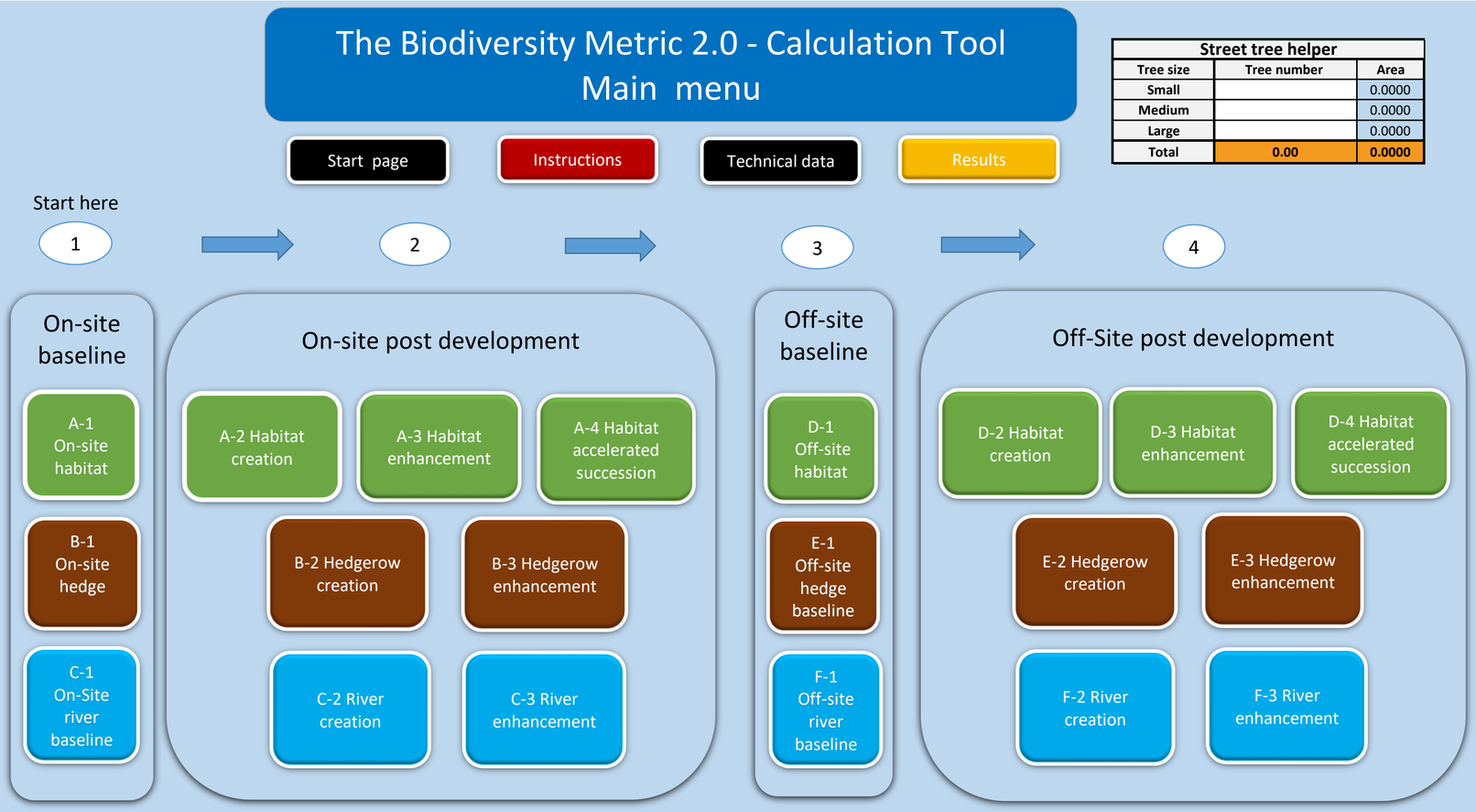
Street tree helper		
Tree size	Tree number	Area
Small		0.0000
Medium		0.0000
Large		0.0000
Total	0.00	0.0000



The Biodiversity Metric 2.0 - Calculation Tool

Return to start page

Headline results

Detailed results

Habitat trading summary

Land West of Sheffield Road, Hoyland - Attenuation Land

Headline Results

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On-site baseline	*Habitat units*	17.66
	Hedgerow units	4.07
	River units	0.00
On-site post-intervention (Including habitat retention, creation, enhancement & succession)	*Habitat units*	45.98
	Hedgerow units	4.13
	River units	0.00
Off-site baseline	*Habitat units*	0.00
	Hedgerow units	0.00
	River units	0.00
Off-site post-intervention (Including habitat retention, creation, enhancement & succession)	*Habitat units*	0.00
	Hedgerow units	0.00
	River units	0.00
Total net unit change (including all on-site & off-site habitat retention/creation)	*Habitat units*	28.32
	Hedgerow units	0.06
	River units	0.00
Total net % change (including all on-site & off-site habitat creation + retained habitats)	*Habitat units*	160.31%
	Hedgerow units	1.43%
	River units	0.00%

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Detailed Results

Return to results menu

Summary Figures

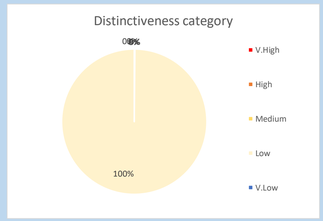
Net project biodiversity units (including all on-site & off-site habitat retention/creation)	*Habitat units*	28.32
	Hedgerow units	0.06
	River units	0.00
Total project biodiversity % change (including all On-site & Off-site Habitat Creation + Retained Habitats)	*Habitat units*	160.31%
	Hedgerow units	1.43%
	River units	0.00%

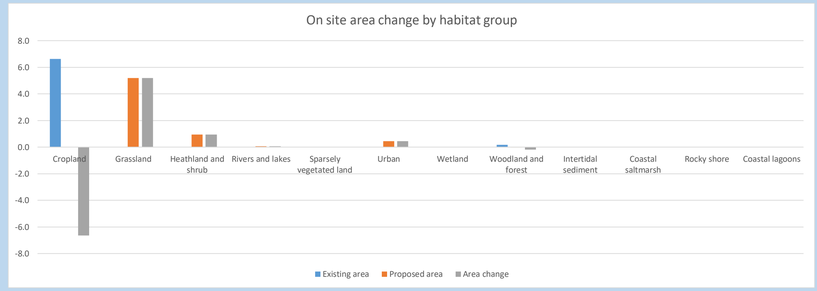
On-site habitat retention and enhancement

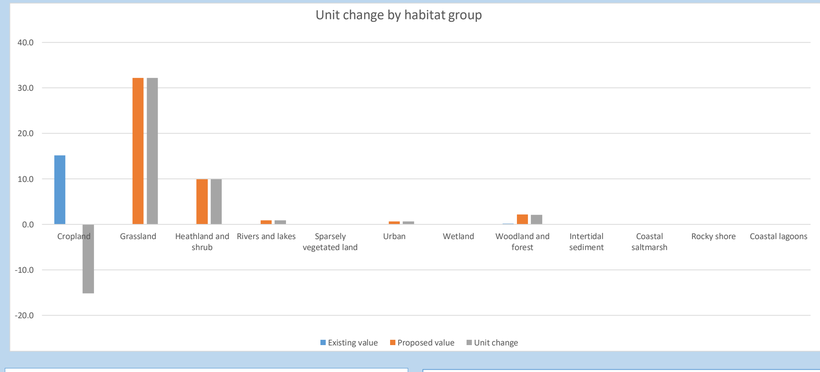
	Habitats	Hedgerows	Rivers
Total site area / length	6.82	0.60	0.00
Total site units	17.66	4.07	0.00
Area / length retained	0.17	0.39	0.00
Units Retained	2.35	2.64	0.00
Area / length enhanced	0.00	0.00	0.00
Baseline units enhanced	0.00	0.00	0.00
Area / length succession	0.00		
Units succession	0.00		
Area / length lost	6.65	0.21	0.00
Units lost	15.32	1.43	0.00

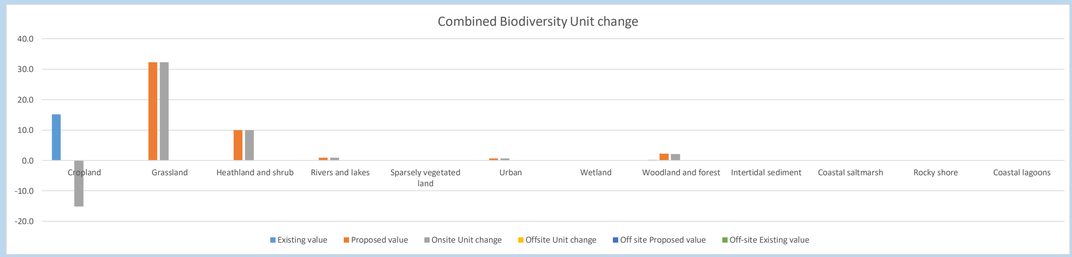
lost by distinctiveness l

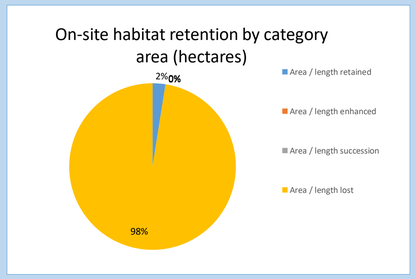
Category	Area lost (hectares)	Area lost (%)
V.High	0	
High	0.01	0
Medium	0	
Low	6.64	100
V.Low	0	

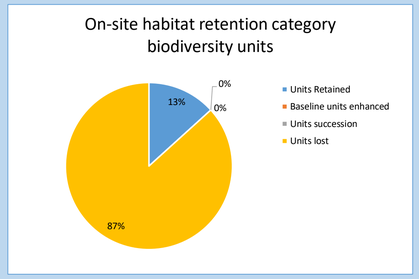












On-site	Baseline		Post development on site		Onsite Change	
Habitat group	Existing area	Existing value	Proposed area	Proposed value	Area change	Onsite Unit change
Cropland	6.6	15.2	0.0	0.0	-6.6	-15.2
Grassland	0.0	0.0	5.2	32.2	5.2	32.2
Heathland and shrub	0.0	0.0	0.9	9.9	0.9	9.9
Rivers and lakes	0.0	0.0	0.1	0.9	0.1	0.9
Sparsely vegetated land	0.0	0.0	0.0	0.0	0.0	0.0
Urban	0.0	0.0	0.5	0.6	0.5	0.6
Wetland	0.0	0.0	0.0	0.0	0.0	0.0
Woodland and forest	0.2	0.1	0.0	2.2	-0.2	2.1
Intertidal sediment	0.0	0.0	0.0	0.0	0.0	0.0
Coastal saltmarsh	0.0	0.0	0.0	0.0	0.0	0.0
Rocky shore	0.0	0.0	0.0	0.0	0.0	0.0
Coastal lagoons	0.0	0.0	0.0	0.0	0.0	0.0

Overall Change	
Area change	Unit change
-6.6	-15.2
5.2	32.2
0.9	9.9
0.1	0.9
0.0	0.0
0.5	0.6
0.0	0.0
-0.2	2.1
0.0	0.0
0.0	0.0
0.0	0.0
0.0	0.0

Off-site	Baseline		Post development Off-site		Off-site Change	
Habitat group	Existing area	Off-site Existing value	Proposed area	Off site Proposed value	Area change	Offsite Unit change
Cropland	0.0	0.0	0.0	0.0	0.0	0.0
Grassland	0.0	0.0	0.0	0.0	0.0	0.0
Heathland and shrub	0.0	0.0	0.0	0.0	0.0	0.0
Rivers and lakes	0.0	0.0	0.0	0.0	0.0	0.0
Sparsely vegetated land	0.0	0.0	0.0	0.0	0.0	0.0
Urban	0.0	0.0	0.0	0.0	0.0	0.0
Wetland	0.0	0.0	0.0	0.0	0.0	0.0
Woodland and forest	0.0	0.0	0.0	0.0	0.0	0.0
Intertidal sediment	0.0	0.0	0.0	0.0	0.0	0.0
Coastal saltmarsh	0.0	0.0	0.0	0.0	0.0	0.0
Rocky shore	0.0	0.0	0.0	0.0	0.0	0.0

Coastal lagoons	0.0	0.0	0.0	0.0	0.0	0.0

Combined	Baseline		Combined Post development		Combined change	
Habitat group	Existing area	Existing value	Proposed area	Proposed value	Proposed area	Proposed value
Cropland	6.6	15.2	0.0	0.0	-6.6	-15.2
Grassland	0.0	0.0	5.2	32.2	5.2	32.2
Heathland and shrub	0.0	0.0	0.9	9.9	0.9	9.9
Rivers and lakes	0.0	0.0	0.1	0.9	0.1	0.9
Sparsely vegetated land	0.0	0.0	0.0	0.0	0.0	0.0
Urban	0.0	0.0	0.5	0.6	0.5	0.6
Wetland	0.0	0.0	0.0	0.0	0.0	0.0
Woodland and forest	0.2	0.1	0.0	2.2	-0.2	2.1
Intertidal sediment	0.0	0.0	0.0	0.0	0.0	0.0
Coastal saltmarsh	0.0	0.0	0.0	0.0	0.0	0.0
Rocky shore	0.0	0.0	0.0	0.0	0.0	0.0
Coastal lagoons	0.0	0.0	0.0	0.0	0.0	0.0

Land West of Sheffield Road, Hoyland - Attenuation Land

A-1 Site Habitat Baseline

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Ref	Habitats and areas			Habitat distinctiveness		Habitat condition		Ecological connectivity			Strategic significance			Suggested action to address habitat losses	Ecological baseline
	Broad Habitat	Habitat type	Area (hectares)	Distinctiveness	Score	Condition	Score	Ecological connectivity	Connectivity	Connectivity multiplier	Strategic significance	Strategic significance	Strategic position multiplier		Total habitat units
1	**Cropland**	Cropland - Cereal crops	0.93	Low	2	N/A - Agricultural	1	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness or better habitat required	2.05
2	**Cropland**	Cropland - Cereal crops	5.71	Low	2	N/A - Agricultural	1	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	Same distinctiveness or better habitat required	13.13
3	**Woodland and forest**	Woodland and forest - Lowland mixed deciduous woodland	0.18	High	6	Moderate	2	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	Same habitat required	2.48
4															
5															
6															
7															
8															
9															
10															
11															
		Total site area ha	**6.82**											**Total Site baseline**	**17.66**

Retention category biodiversity value								Bespoke compensation agreed for unacceptable losses	Comments	
Area retained	Area enhanced	Area succession	Baseline units retained	Baseline units enhanced	Baseline units succession	Area lost	Units lost		Assessor comments	Reviewer comments
			0.00	0.00	0.00	0.93	2.05			
			0.00	0.00	0.00	5.71	13.13			
0.17			2.35	0.00	0.00	0.01	0.14			
0.17	**0.00**	**0.00**	**2.35**	**0.00**	**0.00**	**6.65**	**15.32**			

Land West of Sheffield Road, Hoyland - Attenuation Land

A-2 Site Habitat Creation

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Post development/ post intervention habitats																			
						Ecological connectivity			Strategic significance			Temporal multiplier		Difficulty multipliers			Comments		
Proposed habitat	Area (hectares)	Distinctiveness	Score	Condition	Score	Ecological connectivity	Connectivity	Connectivity multiplier	Strategic significance	Strategic significance	Strategic position multiplier	Time to target condition/years	Time to target multiplier	Difficulty of creation category	Difficulty of creation multiplier	Habitat units delivered	Assessor comments	Reviewer comments
Urban - Amenity grassland	0.28	Low	2	Poor	1	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	1	0.965	Low	1	0.62		
Lakes - Ponds (Non- Priority Habitat)	0.07	High	6	Moderate	2	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	3	0.899	Low	1	0.87		
Heathland and shrub - Mixed scrub	0.41	Medium	4	Good	3	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	7	0.779	Low	1	4.22		
Heathland and shrub - Mixed scrub	0.53	Medium	4	Good	3	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	7	0.779	Low	1	5.70		
Grassland - Other neutral grassland	0.51	Medium	4	Good	3	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	15	0.586	Low	1	3.95		
Grassland - Other neutral grassland	2.07	Medium	4	Good	3	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	15	0.586	Low	1	16.74		
Grassland - Other neutral grassland	2.6	Medium	4	Poor	1	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	1	0.965	Low	1	11.54	SUDS - large basin	
Urban - Developed land; sealed surface	0.18	V.Low	0	N/A - Other	0	N/A	Assessment not appropriate	1	Within area formally identified in local strategy	High strategic significance	1.15	0	1.000	Low	1	0.00		
Totals	**6.65**														**Total Units**	**43.63**		

Land West of Sheffield Road, Hoyland - Attenuation Land

B-1 Site Hedge Baseline

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	UK Habitats - existing habitats			Habitat distinctiveness		Habitat condition		Ecological connectivity			Strategic significance				Ecological baseline
Baseline ref	Hedge number	Hedgerow type	length KM	Distinctiveness	Score	Condition	Score	Ecological connectivity	Connectivity	Connectivity multiplier	Strategic significance	Strategic significance	Strategic position multiplier	Suggested action to address habitat losses	Total hedgerow units
1		Native Hedgerow	0.17	Low	2	Good	3	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness band or better	1.122
2		Native Hedgerow	0.14	Low	2	Good	3	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.966
3		Native Hedgerow	0.06	Low	2	Good	3	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness band or better	0.396
4		Native Hedgerow	0.14	Low	2	Good	3	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.966
5		Native Hedgerow with trees	0.09	Low	2	Good	3	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.621
6															
7															
8															
9															
10															
		Total Site length/KM	0.60											Total Site baseline	4.07

Retention category biodiversity value						Comments	
Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	Assessor comments	Reviewer comments
0.17		1.122	0	0	0	H20	
0.14		0.966	0	0	0	H21	
		0	0	0.06	0.396	H1 (H22)	
		0	0	0.14	0.966	H1 (H22)	
0.08		0.552	0	0.01	0.069	H23	
0.39	0.00	2.64	0.00	0.21	1.43		

Land West of Sheffield Road, Hoyland - Attenuation Land

B-2 Site Hedge Creation

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								Multipliers											
								Spatial quality						Temporal multiplier		Difficulty of creation multiplier	Hedge units delivered	Comments	
		Proposed habitats		Habitat distinctiveness		Habitat condition		Ecological connectivity			Strategic significance								
Baseline ref	New hedge number	Habitat type	Length km	Distinctiveness	Score	Condition	Score	Ecological connectivity	Connectivity	Connectivity multiplier	Strategic significance	Strategic significance	Strategic position multiplier	Time to target condition/years	Time to target multiplier			Assessor comments	Reviewer comments
1		Native Species Rich Hedgerow	0.06	Medium	4	Good	3	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	10	0.700	0.67	0.39	Hx	
2		Native Species Rich Hedgerow	0.17	Medium	4	Good	3	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	10	0.700	0.67	1.10	Hy	
3																			
4																			
5																			
6																			
7																			
		Creation Length/KM	0.23														1.49		